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Annual Report

DEPARTMENT
OF PUBLIC HEALTH

CITY OF
NEWARK, N. J.



1909

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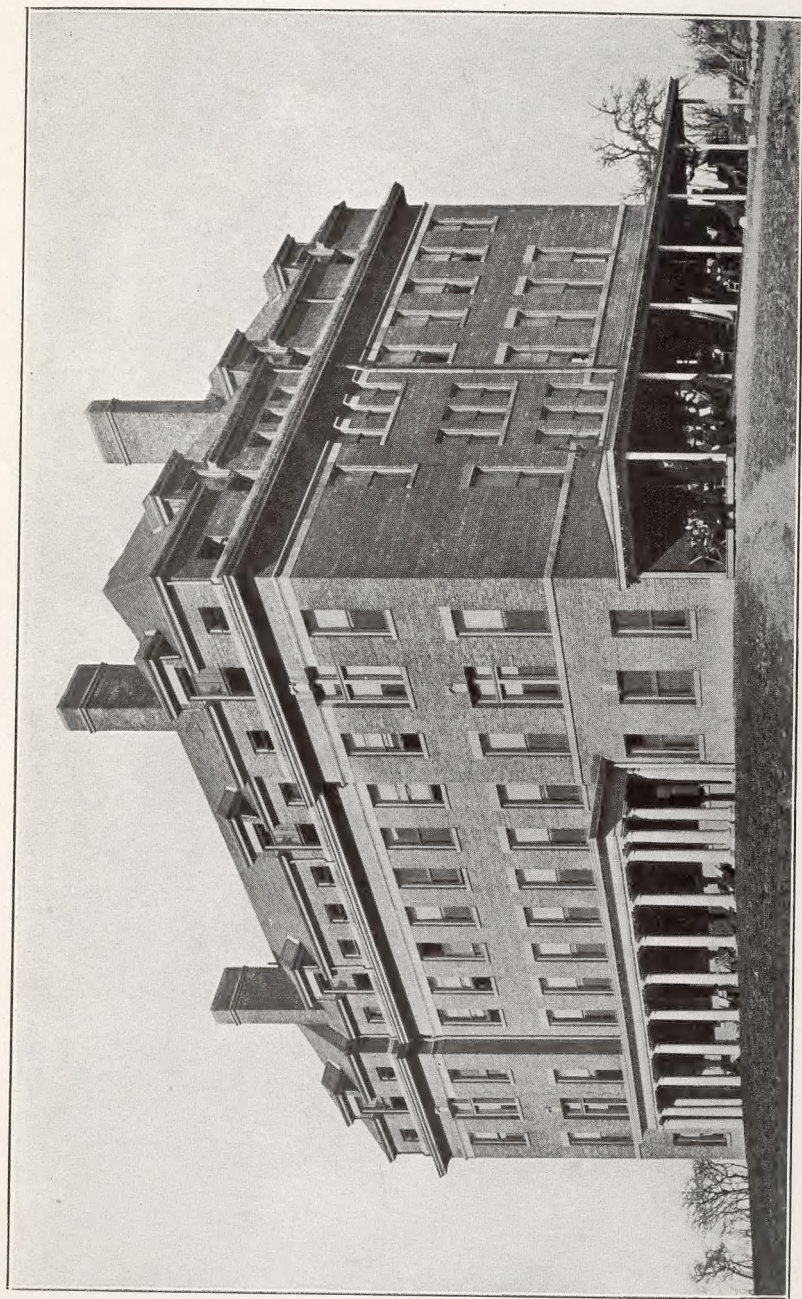
Annual Report

DEPARTMENT
OF PUBLIC HEALTH

CITY OF
NEWARK, N. J.



1909



THE NEWARK CITY TUBERCULOSIS SANITARIUM, VERONA, N. J.

ANNUAL REPORT

OF THE

Department of Public Health

CITY OF NEWARK, N. J.



FOR THE YEAR 1909 .

DEPARTMENT OF PUBLIC HEALTH

BACTERIOLOGICAL LABORATORY

CULTURE COLLECTOR'S REPORT

SUPPLIES AT STATIONS

| | Antitoxin | | Culture Outfits | | Sputum Jars | | Typhoid Outfits | |
|--|-----------|-----------|-----------------|-----------|-------------|-----------|-----------------|-----------|
| | On Hand | Delivered | On Hand | Delivered | On Hand | Delivered | On Hand | Delivered |
|191 | | | | | | | | |
| Newark, N. J. | | | | | | | | |
| OSCAR SCHOLZ, 131 Hamburg Pl..... | | | | | | | | |
| HARRY S. BLOOME, 77 Ferry St..... | | | | | | | | |
| O. VON GERHEN, 200 Ferry St..... | | | | | | | | |
| L. GRIESSENBECK, 28 Bowery St..... | | | | | | | | |
| CHAS. HOLZHAUER, 787 Broad St..... | | | | | | | | |
| E. F. FIELDING, 925 Broad St..... | | | | | | | | |
| EO. LINNETT & BRO., 77 Lincoln Pk..... | | | | | | | | |
| L. SAYRE, 484 Broad St..... | | | | | | | | |
| MOLL, 166 Central Av..... | | | | | | | | |
| 169 So. Orange Av..... | | | | | | | | |
| So. Orange Av..... | | | | | | | | |
| STNER, 320 Bank St..... | | | | | | | | |
| MENK, 106 Market St..... | | | | | | | | |
| MICHAEL'S HOSP., Central Av. & High St. | | | | | | | | |
| DAVID STRAUSS, Springfield Av. & High St. | | | | | | | | |
| E. BROCH, Central Av. & First St..... | | | | | | | | |
| F. L. Feindt, 76 Belmont Av..... | | | | | | | | |
| EMIL REICHLE, 362 Springfield Av..... | | | | | | | | |
| W. E. MOORE, 503 Clinton Av..... | | | | | | | | |
| L. HAGNY, Central Av. & Fifth St..... | | | | | | | | |
| W. R. SCUDDER, 95 Belleville Av..... | | | | | | | | |
| OSBORNE KLEIN CO., 289 Belleville Av..... | | | | | | | | |
| A. R. BIANCHI, 7th Av. & Sheffield St..... | | | | | | | | |
| J. B. FOSTER, 7th & Roseville Aves..... | | | | | | | | |
| GEO. D. FOSTER, 190 Washington Av..... | | | | | | | | |
| H. J. QUINN, 187 Bloomfield Av..... | | | | | | | | |
| G. T. Tempel, Clinton & 1st St..... | | | | | | | | |
| St Barnabas Hosp..... | | | | | | | | |
| Pharm..... | | | | | | | | |

STANDING COMMITTEES OF THE BOARD OF HEALTH

FOR YEAR 1909

SANITATION.

Mr. DOBBINS

Mr. FOYLE

Dr. CORWIN

Mr. BAKER

Mr. ROWE

FINANCE.

Mr. ROWE

Mr. BAKER

Mr. DOBBINS

LAWS AND ORDINANCES.

Mr. VANCE

Mr. FOYLE

Mr. BAKER

RULES.

Dr. CORWIN

Dr. WARREN

Dr. WRIGHTSON

APPOINTMENTS.

Mr. FOYLE

Dr. MEEKER

Mr. VANCE

SUPPLIES.

Mr. BAKER

Mr. FOYLE

Mr. DOBBINS

CITY HOSPITAL.

Dr. WRIGHTSON

Dr. WARREN

Mr. DOBBINS

Mr. FOYLE

Mr. VANCE

TRAINING SCHOOL.

Dr. CORWIN

Dr. WARREN

Dr. WRIGHTSON

Dr. MEEKER

Dr. HEROLD

TUBERCULOSIS SANITARIUM.

Dr. WARREN

Mr. FOYLE

Dr. CORWIN

Dr. MEEKER

Mr. BAKER

MOSQUITO COMMITTEE.

Mr. DOBBINS

MEETINGS

The regular meetings of the Board are held on the First and Third Tuesdays of each month, at 8.30 P. M. The meeting on the First Tuesday shall be held for the transaction of all business pertaining to the Sanitary Department. The meeting on the Third Tuesday shall be held for the transaction of all business pertaining to the Newark City Hospital and the Newark Tuberculosis Sanitarium.

The regular meetings of the Sanitary Committee will be held on the Thursday preceding the first Tuesday of each month at 8.30 P. M.

Should the above meeting fall on a legal holiday, said meeting shall be held on the day previous.

BOARD OF HEALTH.

EMPLOYEES OF THE BOARD
OF HEALTH

OFFICE DIVISION.

| | |
|---------------------------|--|
| JOHN J. GREENE..... | Clerk, Bureau Contagious Diseases 308 Riverside Avenue. |
| EUGENE W. BELLAR..... | Clerk, Sanitary Division 45 Congress Street. |
| WILLIAM H. YOUNG..... | Clerk, Sanitary Division 673 Summer Avenue. |
| ELBERT S. BALL..... | Clerk Sanitary Division 19 Nichols Street. |
| MISS ROSE KENNEDY..... | Stenographer to Health Officer 26 Monmouth Street. |
| MISS JENNIE McNALLY..... | Telephone Operator 37 Fillmore Street. |
| MISS CORA B. NATHAN..... | Clerk 375 Walnut Street. |
| EDWARD E. WORL, M. D..... | Supt. Bureau Contagious Diseases 271 High Street. |
| HERBERT B. BALDWIN..... | Chemist 927 Broad Street. |
| WILLIAM WIENER..... | Meteorologist 62½ Nelson Place. |

BACTERIOLOGICAL DIVISION.

| | |
|-------------------------|---|
| DR. R. N. CONNOLLE..... | Bacteriologist City Hospital Building. |
| DR. THOMAS RIPLEY..... | Assistant Bacteriologist 104 Orchard Street. |
| DR. H. A. TARBELL..... | Second Assistant Bacteriologist 28½ Thomas Street. |
| ERNEST SKILLMAN..... | Laboratory Assistant 206 So. 10th Street. |
| ALBERT BREIDENBACH..... | Culture Collector 150 Bergen Street. |

BOARD OF HEALTH.

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CITY DISPENSARY.

| | |
|------------------------|-----------------------------|
| WILLIAM A. SMITH..... | <i>Apothecary</i> |
| 3 Hillside Avenue. | |
| HENRY OLTMAN..... | <i>Assistant Apothecary</i> |
| 348 Thirteenth Avenue. | |
| WILLIAM M. GOULD..... | <i>Dentist</i> |
| 85 Halsey Street. | |
| PAYSACH G. SPAN..... | <i>Janitor</i> |
| 169 Belmont Avenue. | |

DISTRICT PHYSICIANS.

| | |
|-----------------------------|-------------------------|
| HARRY C. POVEY..... | 39 Mott Street |
| DR. F. W. PINNEO..... | 139 Garside Street |
| JAMES H. TRAINOR..... | 131 Elm Street |
| DR. CHARLES L. O'NEILL..... | 297 Central Avenue |
| EDWARD F. FITZPATRICK..... | 574 Warren Street |
| SAMUEL HIRSCHBERG..... | 496 Bergen Street |
| LOUIS WEISS..... | 227 South Orange Avenue |
| PLINY W. BARBER..... | 169 Mt. Prospect Avenue |
| ALBERT S. HARDEN..... | 540 Warren Street |
| DR. MEYER JEDEL..... | 362 Warren Street |
| MARY E. BROADNAX..... | 63 Elizabeth Avenue |

SANITARY DIVISION—MEAT INSPECTORS.

| | |
|-------------------|---------------------|
| WERNER RUNGE..... | 130 Union Street |
| DANIEL KUHN..... | 882 So. 17th Street |

PLUMBING INSPECTORS.

| | |
|--------------------------------------|--------------------|
| JOHN B. SULLIVAN, <i>Chief</i> | 204 Second Street |
| JOHN L. WHEALAN..... | 120 Lincoln Avenue |
| EDWARD P. COULSTON..... | 375 Walnut Street |
| CHARLES A. HALLGRING..... | 374 Walnut Street |
| EDWARD J. MCGOOKIN..... | 94 Oraton Street |

FOOD AND DRUG INSPECTORS.

| | |
|-------------------------|-------------------|
| OTTO B. SCHALK..... | 454 Fourth Avenue |
| SAMUEL G. SHARWELL..... | 69 So. 7th Street |

BOARD OF HEALTH.

INSPECTOR NURSES.

MRS. LOUISE RICHARDS WHEATON.....178 Plane S
MISS LAVINIA M. WARD.....212 Broad S

DETAILED INSPECTOR TO HEALTH OFFICER.

ANDREW J. BRADY.....17 Howard S

SANITARY INSPECTORS.

WILLIAM H. LYLE.....227 So. 6th S
FORMAN J. REYNOLDS.....20 Rector S
CHARLES H. BURKE.....125 Union S
BERNARD J. CAHILL.....23 Humboldt S
HUBERT O'ROURKE.....185 Barclay S
ANTONIO PANZERA.....95 Madison S
WILLIAM S. WEBB.....96 Alpine S
PATRICK J. KEATING.....111 Bergen S
GEORGE A. VAN HOUTEN.....716 Bergen S
WILLIAM HOPPER.....142½ Sherman Av
JAMES WHELAN.....193 Parker S
LEWIS E. BOUTILLIER.....223 So. 9th S
HENRY MACDONALD.....325 So. 11th S
CHARLES F. CONRAD.....124 Littleton Av
CASPAR BENZ.....34 Fifth S
EDWARD J. FLYNN.....67 First S
IRWIN C. DAKIN.....88 Bruce S
CHARLES E. DEVINE.....61 E. Park S
HOWARD HUFFERT.....23 Howard S

DISINFECTING CORPS.

SAMUEL KNOTT, *Chief*.....279 Plane S
HIRAM R. STEWART.....3 Laurel S
LEONARD V. GILLEN.....24 Orchard S
THOMAS F. NEWTON.....17 Rowland S
RICHARD J. CORBELL.....27 Highland Av
REGINALD RAYMOND.....455 Clinton Av
THOMAS MULLIGAN.....124 Newton S
MORRIS SEIDL.....413 So. 8th S
GEO. W. GILMORE.....146 Badger Av

GEORGE FRANCISCO.....Ja
177 Pennsylvania Avenue.

DISTRICT PHYSICIANS—1909

- 1st DISTRICT—DR. HENRY C. DOVEY—District Lines: Folk Street, Lafayette Street, Hamburg Place, Thomas Street and Passaic River.
- 2d DISTRICT—DR. F. W. PINNEO—District Lines: Polk Street, Lafayette Street, Hamburg Place, Thomas Street, Newark Bay, City Line, Avenue "D," Pacific Street, Clifford Street, Jefferson Street and Passaic River.
- 3rd DISTRICT—DR. JAMES H. TRAINOR—District Lines: Jefferson Street, Clifford Street, Pacific Street, Tichenor Street, Broad Street, Market Street, Railroad Place and Passaic River.
- 4th DISTRICT—DR. CHARLES L. O'NEIL—District Lines: Railroad Place, Market Street, Broad Street, Lincoln Park, Spruce Street, High Street, Central Avenue, Fulton Street and Passaic River.
- 5th DISTRICT—DR. EDW. F. FITZPATRICK—District Lines: High Street, Warren Street, Newark Street, Richmond Street, Rankin Street, Charlton Street, Spruce Street.
- 6th DISTRICT—DR. SAMUEL HIRSCHBERG—District Lines: Charlton Street, Springfield Avenue, Fifteenth Avenue, City Line, Lyons Avenue, Clinton Place, Hawthorne Avenue, Ridgewood Avenue, Livingston Street, Eighteenth Avenue and Spruce Street.
- 7th DISTRICT—DR. LOUIS WEISS—District Lines: Fifteenth Avenue, Springfield Avenue, Rankin Street, Richmond Street, Newark Street, Warren Street, Central Avenue and City Line.
- 8th DISTRICT—DR. P. W. BARBER—District Lines: High Street, Eighth Avenue, Clifton Avenue, Norfolk Street, Central Avenue, Hudson Street and Warren Street.

9th DISTRICT—DR. A. S. HARDEN—District Lines: Central Avenue, Warren Street, Hudson Street, Central Avenue, Norfolk Street, Clinton Avenue, Bloomfield Avenue and City Line.

10th DISTRICT—DR. MEYER JEDEL—District Lines: Fulton Street, Central Avenue, High Street, Eighth Avenue, Clifton Avenue, Bloomfield Avenue, City Line and Passaic River.

11th DISTRICT—DR. MARY E. BROADNAX—District Lines: Avenue "D," Pacific Street, Tichenor Street, Lincoln Park, Spruce Street, Eighteenth Avenue, Livingston Street, Ridgewood Avenue and City Line.

ANTITOXIN AND CULTURE STATIONS

Established by the Board of Health for the Collection of Cultures and Distribution of Antitoxin

BOARD OF HEALTH.

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| | | | | |
|-----------------------------------|-----|---------------------------------------|-------|--------------|
| OSCAR SCHOLZ..... | 131 | Hamburg Place..... | 4343 | Market |
| HARRY S. BLOOME..... | 77 | Ferry Street..... | 1493 | " |
| O. VON GERHEN..... | 200 | Ferry Street..... | 3187 | " |
| L. GRIESEBECK..... | 28 | Bowery Street..... | 1590 | " |
| CHAS. HOLZHAUER..... | 787 | Broad Street..... | 1312 | " |
| E. F. FIELDING..... | 925 | Broad Street..... | 1075 | " |
| GEO. LINNETT & BRO..... | 77 | Lincoln Park..... | 3034 | " |
| A. E. SAYRE..... | 484 | Broad Street..... | 3754 | " |
| CHAS. P. MOILL..... | 106 | Central Avenue..... | 1319 | " |
| L. L. STAEBLE..... | 169 | South Orange Avenue..... | 1539 | " |
| D. S. BELDON..... | 315 | South Orange Avenue..... | 1514 | " |
| E. P. KASTNER..... | 320 | Bank Street..... | 1391 | " |
| C. W. MENK..... | 106 | Market Street..... | 291 | " |
| ST. MICHAEL'S HOSPITAL..... | | Central Avenue & High Street..... | 84 | " |
| DAVID STRAUSS..... | | Springfield Avenue & High Street..... | 4633 | " |
| E. BROCH..... | | Central Avenue & First Street..... | 4162J | " |
| F. L. FEINDT..... | | 76 Belmont Avenue..... | 2494 | Waverly |
| EMIL REICHEL..... | | 362 Springfield Avenue..... | 2023 | " |
| W. E. MOORE..... | | 503 Clinton Avenue..... | 2468 | " |
| L. HAGNY..... | | Central Avenue & Fifth Street..... | 1651 | Branch Brook |
| W. R. SCUDDER..... | | 95 Belleville Avenue..... | 1142 | " |
| OSBORNE KLEIN Co..... | | 289 Belleville Avenue..... | 761 | " |
| A. R. BRANCHI..... | | 7th Avenue & Sheffield Street..... | 1430 | " |
| J. B. FOSTER..... | | 7th & Roseville Avenues..... | 151 | " |
| GEO. D. FOSTER..... | | 100 Washington Avenue..... | 1091 | " |
| H. J. QUINN..... | | 187 Bloomfield Avenue..... | 269 | " |
| *1ST PRECINCT POLICE STATION..... | | | 5400 | Market |
| 2ND PRECINCT POLICE STATION..... | | | 5400 | " |
| 3RD PRECINCT POLICE STATION..... | | | 5400 | " |
| 4TH PRECINCT POLICE STATION..... | | | 5400 | " |
| 5TH PRECINCT POLICE STATION..... | | | 5400 | " |
| 6TH PRECINCT POLICE STATION..... | | | 5400 | " |

* Police station for distribution of Antitoxin only.

CLINICS AT CITY DISPENSARY

MEDICAL.

9 A. M. daily except Sunday.

DISEASES OF CHILDREN.

Monday, Wednesday, Friday, 10 o'clock.

SURGICAL.

Daily at 12 o'clock, Saturday at 11, and not Sunday.

GENITO URINARY.

Monday and Thursday, 10 o'clock.

DISEASES OF WOMEN.

Tuesday and Friday, 3 o'clock.

DISEASES OF SKIN.

Tuesday and Friday, 9.30 o'clock.

DENTIST.

Monday, Wednesday, Friday, 1 o'clock.

THROAT AND NOSE.

Monday and Thursday, 3 o'clock.

TUBERCULOSIS.

Monday and Wednesday, 3 o'clock.

NERVE DISEASES.

Friday, 2 o'clock.

ANNUAL REPORT
OF THE
HEALTH OFFICER
FOR THE YEAR 1909

ANNUAL REPORT

OF THE

HEALTH OFFICER

To the Honorable the Board of Health of the City of Newark, N. J.

GENTLEMEN:—I have the honor to herewith present to you my report of the workings of the various divisions of the Department of Public Health, together with a report of the Bacteriologist, Superintendent of Medical Bureau of Contagious Diseases, Medical Director of Tuberculosis Sanitarium and Chemist for the year ending December 31, 1909.

SANITARY DIVISION.

The City is divided into seventeen districts, patrolled by seventeen inspectors, appointed by the Board of Health. Each inspector is held responsible for the sanitary condition of his district.

CONSOLIDATED REPORT OF NUISANCES FOR THE YEAR 1909.

| | |
|--|--------|
| Inspections from Complaint Book..... | 2,768 |
| Inspections from Complaint Book, verified..... | 2,305 |
| Inspections from Complaint Book, no cause..... | 463 |
| Number of original inspections made..... | 11,838 |
| Total number of inspections made..... | 14,606 |
| Number of written notices served..... | 2,269 |
| Number of abatements from written notices..... | 1,931 |
| Number of verbal notices served..... | 5,440 |

| | |
|---|------------|
| Number of abatements from verbal notices served..... | 4,468 |
| Total number of abatements..... | 6,399 |
| Number of hours in court..... | 156 |
| Well water analyzed and examined..... | 10 |
| Number of wells closed..... | 4 |
| Sewer connections ordered..... | 326 |
| Sewer drains inspected..... | 1,490 |
| Cesspools inspected..... | 60 |
| Alleys inspected..... | 1,117 |
| Alleys filthy..... | 158 |
| Streets needing cleaning..... | 102 |
| Areas needing cleaning..... | 1,049 |
| Cellars needing cleaning..... | 1,249 |
| Ashes accumulation—yards and vacant lots..... | 815 |
| Garbage accumulation..... | 662 |
| Surface drainage..... | 87 |
| Vacant lots in an unsanitary condition..... | 122 |
| Stagnant water on vacant lots..... | 134 |
| Defective water pipes..... | 306 |
| Houses filthy..... | 34 |
| Houses unfit for habitation..... | 9 |
| Slaughter houses inspected..... | 35 |
| Slaughter houses filthy..... | 20 |
| Houses unprovided with water-closets or privy vaults.... | 16 |
| Houses with no water supply..... | 114 |
| Houses with roofs leaking..... | 148 |
| Storm gutters and storm leaders on buildings defective.... | 373 |
| Hydrant in yards defective..... | 35 |
| Privy houses filthy..... | 75 |
| Privy vaults full..... | 174 |
| Cesspools ordered built..... | 22 |
| Cesspools full..... | 68 |
| Privy houses dilapidated..... | 9 |
| Privy vaults and houses over same ordered reconstructed.. | 17 |
| Privy vaults ordered cleaned and filled..... | 236 |
| Yards inspected..... | 13,403 |
| Yards in an unsanitary condition..... | 1,276 |
| Plumbing defective..... | 455 |
| Water-closets defective..... | 506 |
| Pits under water-closets in yards defective and not water tight..... | 114 |
| Stables inspected—including cow stables..... | 2,467 |
| Manure accumulation..... | 1,070 |

BOARD OF HEALTH.

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| | |
|--|--------|
| Number of animal permits issued..... | 163 |
| Number of Animals licensed..... | 813 |
| Number of house to house inspections..... | 168 |
| Total number of nuisances found..... | 8,962 |
| Total number of reinspections..... | 10,632 |
| No. of suit cases instituted for violation of the Sanitary Code | 148 |
| Number of cases in which penalties were imposed..... | 14 |
| Number of cases discontinued on payment of costs and nuisance abated..... | 47 |
| Number of cases discontinued (change in ownership).... | 6 |
| Number of cases discontinued prior to summons being served, work having been done..... | 79 |
| Number of cases instituted by drug and food inspector.... | 3 |
| Number of cases in which penalties were imposed..... | 3 |

PLUMBING DIVISION.

This division consists of a chief plumbing inspector and four practical plumbers, and the following is a summary of the work performed by them during the year 1909:

| | |
|--------------------------------------|-------|
| Plans approved..... | 2,113 |
| Plans rejected..... | 143 |
| Water tests made..... | 1,956 |
| Plumbing inspections made..... | 2,779 |
| Final plumbing inspections made..... | 1,034 |
| Smoke tests made..... | 962 |
| Peppermint tests made..... | 8 |
| Sewer permits granted..... | 1,454 |
| Cesspool permits granted..... | 4 |
| Privy vault permits granted..... | 3 |
| Manure pit permits granted..... | 21 |
| Relay sewer permits granted..... | 181 |
| Violations served..... | 16 |
| Violations rectified..... | 5 |
| Number of hours in court..... | 69 |

MEAT AND LIVE STOCK DIVISION.

This division consist of two inspectors, one a veterinarian, whose duty it is to look after the slaughter houses and wholesale meat markets, and the other an experienced

butcher, whose duty it is to visit all the public and private meat and vegetable markets. The following is a summary of the work performed during the year 1909:

| | |
|------------------------|--------|
| Cattle inspection..... | 21,000 |
| Calves inspected..... | 24,460 |
| Sheep inspected..... | 37,720 |
| Hogs inspected..... | 15,300 |
| Total..... | 98,500 |

CONDEMNED.

| | |
|------------------------|----|
| Calves | 30 |
| Cows | 18 |
| Carcasses of beef..... | 18 |

BUTCHER SHOPS VISITED.

| | |
|--|---------|
| Centre Market visited daily. | |
| Number of visits..... | 8,440 |
| Number of carcasses of beef inspected..... | 25,124 |
| Number of lamb and sheep inspected..... | 78,758 |
| Number of calves inspected..... | 11,776 |
| Number of hogs inspected..... | 13,956 |
| Total..... | 138,060 |

CONDEMNED.

| | |
|-------------------------------|----|
| Calves | 6 |
| Calves' carcasses..... | 1 |
| Pork loin..... | 8 |
| Bags of potatoes..... | 6 |
| Boxes of smoked herrings..... | 15 |
| Smoked hams..... | 13 |

1 box of codfish; 1 box Salamy bologna; 6 bbls. spinach; 27 crates strawberries; 1 bbl. poultry.

Numerous complaints were investigated and adjusted.

DRUG AND FOOD INSPECTOR'S REPORT

The following inspections of food and milk were made during the year 1909:

| | |
|---|-------|
| Number of dairy wagons halted for milk inspection..... | 1,106 |
| Number of cans of milk inspected on same..... | 2,470 |
| Number of lactometer tests made..... | 243 |
| Number of stores visited..... | 324 |
| Number of cans of milk inspected in stores..... | 317 |
| Number of lactometer tests made..... | 179 |
| Number of samples of milk found suspicious and sent to Chemist for analysis..... | 299 |
| Number of samples sent to Bacteriologist for examination. | 216 |

In addition to the foregoing table, complaints were made of fruits, vegetables, candy flavoring, coloring and condensed milk. Sixty-one special inspections were made.

CONDEMNED.

| |
|-------------------------|
| 36 bbls. apples. |
| 20 bags potatoes. |
| 1 box oranges. |
| 2 bbls. cucumbers. |
| 115 boxes grapes. |
| 38 crates strawberries. |
| 7 crates tomatoes. |
| 17 crates peaches. |
| 1 bbl. pears. |
| 5 bags onions. |
| 1 wagon-load onions. |

DETAILED SPECIAL INSPECTOR'S REPORT

FOR YEAR 1909.

The following visits were made to the Water Sheds, Cedar Grove and Belleville Reservoirs, for the purpose of obtaining samples of our City Water Supply for Bacteriological and Chemical examinations:

| | |
|--|----|
| Number of visits to Water Sheds..... | 33 |
| Number of visits to Cedar Grove Reservoir..... | 33 |
| Number of visits to Belleville..... | 33 |

Samples of City Water Supply were taken at the following places and delivered to Bacteriologist:

| | |
|-----------------------------|----|
| Oak Ridge Stream..... | 21 |
| Clinton Stream..... | 21 |
| Kanouse Brook..... | 21 |
| Echo Lake Stream..... | 21 |
| Macopin Intake..... | 42 |
| Cedar Grove Reservoir..... | 41 |
| Belleville Reservoir..... | 21 |
| Board of Health Office..... | 14 |
| From wells..... | 2 |
| From cisterns..... | 1 |
| From Springs..... | 2 |
| Samples of ice..... | |

Total number of samples delivered to Bacteriologist.... 228

Samples of water taken at the following points of the City Water Supply, and delivered to Chemist:

| | |
|----------------------------|----|
| Oak Ridge Stream..... | 12 |
| Clinton Stream..... | 12 |
| Kanouse Brook..... | 12 |
| Echo Lake Stream..... | 12 |
| Macopin Intake..... | 12 |
| Cedar Grove Reservoir..... | 24 |

BOARD OF HEALTH.

21

| | |
|---|-----|
| Belleville Reservoir..... | 12 |
| From well..... | 1 |
| From springs..... | 1 |
| Total number of samples..... | 98 |
| Wells closed..... | 5 |
| Springs closed..... | 2 |
| Number of inspections made..... | 109 |
| Number of inspections made with other inspectors..... | 41 |
| Total number of inspections made..... | 150 |

In addition to the above several places in the Water Sheds, Meadow Land, Cemeteries, Ice Depots, Daily Excursion Boats, Public Bath Houses and Lodging Houses were inspected and reported upon.

Numerous other complaints were investigated and adjusted.

REPORT DISINFECTING CORPS—1909

HOUSES QUARANTINED DURING THE YEAR.

| | |
|---|-------|
| Diphtheria, including Membranous Croup..... | 1,301 |
| Scarlet Fever..... | 1,690 |
| Typhoid Fever, not placarded..... | 207 |
| Cerebro-Spinal Meningitis, not placarded..... | 8 |
| Smallpox not placarded..... | 1 |
| Total number of houses..... | 3,207 |

DISINFECTIONS.

| | |
|--|------------|
| Diphtheria, including Mebranous Croup..... | 1,306 |
| Scarlet Fever..... | 1,542 |
| Tuberculosis | 423 |
| Cebro-Spinal Meningitis..... | 8 |
| Smallpox | 1 |
| Special | 604 |
| Total number of houses..... | 3,884 |
| Total number of cubic feet of air space..... | 14,141,000 |
| Number of control tests made..... | 1,401 |
| Number of visits to houses under quarantine..... | 3,294 |
| Number of nuisances found existing..... | 139 |
| Number of contagious funerals supervised..... | 57 |

CITY DISPENSARY AND OUT-DOOR POOR CONTINGENT

Persons treated at the following clinics:

| | |
|---|--------|
| Medical | 15,802 |
| Surgical | 6,043 |
| Diseases of the skin..... | 2,292 |
| Diseases of children..... | 1,749 |
| Diseases of women..... | 521 |
| Diseases of genito-urinary organs..... | 2,091 |
| Diseases of throat and nose..... | 792 |
| Nervous diseases..... | 1,087 |
| Tuberculosis | 2,069 |
| Number of vaccinations..... | 1,401 |
| Number of vaccine points delivered to medical inspectors of schools..... | 210 |
| Number of teeth extracted..... | 1,450 |
| Number of clinical prescriptions..... | 41,489 |
| Total number of patients treated..... | 35,308 |

Number of Patients sent to the following Hospitals:

| | |
|--------------------------------------|-------|
| City Hospital..... | 550 |
| St. Michael's Hospital..... | 90 |
| St. Barnabas' Hospital..... | 90 |
| St. James' Hospital..... | 95 |
| German Hospital..... | 90 |
| Beth Israel Hospital..... | 114 |
| Hospital for Women and Children..... | 35 |
| Home for Crippled Children..... | 23 |
| Eye and Ear Infirmary..... | 288 |
| Babies' Hospital..... | 229 |
| Eighth Avenue Day Nursery..... | 3 |
| Newark Tuberculosis Sanitarium..... | 147 |
| Total..... | 1,754 |

Number of district prescriptions dispensed as follows:

| | |
|---|-------------|
| First | 518 |
| Second | 589 |
| Third | 954 |
| Fourth | 582 |
| Fifth | 275 |
| Sixth | 373 |
| Seventh | 537 |
| Eighth | 738 |
| Ninth | 127 |
| Tenth | 438 |
| Eleventh | 745 |
| Total number of district prescriptions..... | <hr/> 5,876 |

RECAPITULATION.

| | |
|--|--------|
| Total number of patients treated..... | 32,408 |
| Total number of prescriptions..... | 47,365 |
| Total number of patients sent to hospital..... | 1,754 |

SUMMARY OF SERVICES RENDERED BY
DISTRICT PHYSICIANS.

| | 1st Dist.—Dr. H. C. Povey | 2nd Dist.—Dr. F. W. Pinneo | 3rd Dist.—Dr. J. H. Trainor | 4th Dist.—Dr. Chas. F. Hill | 5th Dist.—Dr. Edw. F. Fitzpatrick | 6th Dist.—Dr. Sam'l Hirschberg | 7th Dist.—Dr. Louis Weiss | 8th Dist.—Dr. P. W. Barber | 9th Dist.—Dr. A. S. Harden | 10th Dist.—Dr. M. Jedel | 11th Dist.—Dr. Mary E. Broadnax |
|--|---------------------------|----------------------------|-----------------------------|-----------------------------|-----------------------------------|--------------------------------|---------------------------|----------------------------|----------------------------|-------------------------|---------------------------------|
| Actual number of houses visited ----- | 186 | 303 | 555 | 405 | 292 | 246 | 311 | 347 | 101 | 300 | 185 |
| Actual number of families visited ----- | 192 | 305 | 557 | 422 | 293 | 241 | 313 | 376 | 101 | 306 | 204 |
| Number of sick prescribed for ----- | 214 | 323 | 578 | 436 | 314 | 250 | 325 | 446 | 106 | 340 | 240 |
| No. of sick found treated by other physicians----- | 13 | 3 | 0 | 8 | 54 | 14 | 0 | 0 | 6 | 4 | 1 |
| Total number of visits made ----- | 738 | 670 | 946 | 834 | 753 | 686 | 590 | 855 | 330 | 714 | 777 |
| Number of patients sent to hospital----- | 20 | 9 | 50 | 74 | 62 | 41 | 32 | 12 | 10 | 58 | 30 |
| Number of deaths----- | 4 | 4 | 14 | 13 | 3 | 7 | 5 | 6 | 10 | 4 | 5 |

RECAPITULATION.

| | | Actual number of houses visited | Actual number of families visited | Sick prescribed for | Found treated by other physicians | Total number of re-visits | Number of patients sent to hospital | Number of deaths |
|-------|----------|------------------------------------|--------------------------------------|------------------------|--------------------------------------|------------------------------|--|------------------|
| 1st | District | 186 | 192 | 214 | 13 | 738 | 20 | 4 |
| 2nd | " | 303 | 305 | 323 | 3 | 670 | 9 | 4 |
| 3rd | " | 555 | 557 | 578 | 0 | 946 | 50 | 14 |
| 4th | " | 405 | 422 | 436 | 8 | 834 | 74 | 13 |
| 5th | " | 292 | 293 | 314 | 54 | 753 | 62 | 3 |
| 6th | " | 246 | 241 | 250 | 14 | 686 | 41 | 7 |
| 7th | " | 311 | 313 | 325 | 0 | 590 | 32 | 5 |
| 8th | " | 347 | 376 | 446 | 0 | 855 | 12 | 6 |
| 9th | " | 101 | 101 | 106 | 6 | 330 | 10 | 10 |
| 10th | " | 265 | 271 | 301 | 4 | 664 | 54 | 4 |
| 11th | " | 185 | 204 | 240 | 1 | 777 | 30 | 5 |
| Total | | 3,231 | 3,310 | 3,572 | 103 | 7,893 | 398 | 75 |

RECEIPTS AND DISBURSEMENTS

OF THE

DEPARTMENT OF PUBLIC HEALTH

FOR YEAR 1909.

| | |
|---|--------------------|
| Cash on Hand January 1, 1909..... | \$ 188.23 |
| Special Appropriation Tuberculosis Sanitarium..... | 2,000.00 |
| Appropriation by Common Council (Tax Ordinance) | 105,000.00 |
| Supplemental Appropriation by Common Council | 21,000.00 |
| Penalties Collected Board of Health Cases.... | 82.85 |
| Dead Animal Contract..... | 2,975.00 |
| | <hr/> \$131,246.08 |

OFFICE RECEIPTS.

| | |
|---|-------------------|
| Plumbing Division, Filing Plans..... | \$ 4,226.00 |
| Chicken Permits..... | 505.00 |
| Milk Licenses..... | 2,864.00 |
| Scavenger Permits..... | 10.20 |
| Board of Patients, Tuberculosis Sanitarium... | 856.49 |
| Sale of Vaccine..... | 94.25 |
| Scavenger License..... | 40.00 |
| Animal Permits..... | 87.30 |
| Ice Licenses..... | 464.00 |
| Ice Plates..... | 113.50 |
| Chicken Slaughter House Permits..... | 6.00 |
| | <hr/> \$ 9,266.74 |

SUNDRIES.

| | |
|--|--------------|
| Telephone Calls..... | \$ 3.20 |
| Sale of Fats—Tuberculosis Sanitarium..... | 11.00 |
| Sale of Horse..... | 40.00 |
| Sale of Coal—Heating Upper Floor of Building | 249.76 |
| Refund "Milk License," 1908..... | 2.00 |
| Refund "Salary"..... | 3.87 |
| Penalty, "Milk Case"..... | 15.00 |
| | <hr/> 324.83 |

BACTERIOLOGICAL DIVISION.

| | |
|-----------------------------------|--------------------|
| Sale of Culture Tubes..... | \$ 18.05 |
| Sale of Diphtheria Antitoxin..... | 677.00 |
| Sale of Sepsis Antitoxin..... | 174.00 |
| Bacteriological Examinations..... | 347.00 |
| | <hr/> \$ 1,216.05 |
| Total Receipts..... | <hr/> \$142,053.70 |

DISBURSEMENTS—SALARIES.

SANITARY DIVISION.

| | |
|--|--------------------|
| Health Officer..... | \$ 4,500.00 |
| Clerks (5)..... | 5,712.00 |
| Stenographer | 1,000.00 |
| Telephone Operator..... | 480.00 |
| Superintendent Bureau Contagious Diseases... | 1,809.12 |
| Chief Disinfecting Corps..... | 1,524.00 |
| Chemist | 1,800.00 |
| Veterinarian and Meat Inspector..... | 2,200.00 |
| Meat Inspector..... | 1,000.00 |
| Plumbing Inspectors (5)..... | 7,500.00 |
| Drug and Food Inspectors (2)..... | 2,724.00 |
| Detailed Inspector to Health Officer..... | 1,524.00 |
| Janitor | 720.00 |
| Orderly Smallpox Hospital..... | 720.00 |
| Sanitary Inspectors (27)..... | 28,282.32 |
| Inspector Nurses (2), Tuberculosis Work..... | 824.52 |
| District Physicians (11)..... | 5,237.42 |
| Meteorologist | 92.00 |
| | <hr/> \$ 67,649.38 |

MOSQUITO EXTERMINATION.

| | |
|-------------------------|-----------------|
| Mosquito Inspector..... | \$ 515.70 |
| Laborer | 213.00 |
| | <hr/> \$ 728.70 |

BACTERIOLOGICAL DIVISION.

| | | |
|--------------------------------------|-------------|-------------|
| Bacteriologist | \$ 4,000.00 | |
| Assistant Bacteriologist..... | 1,200.00 | |
| Second Assistant Bacteriologist..... | 1,000.00 | |
| Laboratory Assistant..... | 1,000.00 | |
| Culture Collector..... | 1,095.00 | |
| | | \$ 8,295.00 |

CITY DISPENSARY.

| | | |
|--------------------------------|-------------|-------------|
| City Apothecary..... | \$ 2,100.00 | |
| Assistant City Apothecary..... | 1,500.00 | |
| Dentist | 300.00 | |
| Janitor | 623.22 | |
| | | \$ 4,523.22 |

TUBERCULOSIS SANITARIUM.

| | | |
|----------------------------|-------------|-------------|
| Medical Director | \$ 1,564.51 | |
| Head Nurse and Matron..... | 900.00 | |
| Nurses (2)..... | 942.26 | |
| Clerk | 550.00 | |
| Engineer | 1,000.00 | |
| Cook | 420.00 | |
| Assistant Cook..... | 300.00 | |
| Maids (3)..... | 521.21 | |
| Waitresses (4)..... | 603.63 | |
| Laundresses (3)..... | 701.78 | |
| Orderly | 435.00 | |
| Helpers | 479.43 | |
| | | \$ 8,417.82 |

Total Salaries.....\$ 89,614.12

DISBURSEMENTS—SANITARY DIVISION.

Office Rent.....\$ 3,000.00

BOARD OF HEALTH.

29

LIGHT AND HEAT.

| | | |
|---------------------|-----------|-----------|
| Electric Light..... | \$ 244.60 | |
| Coal | 368.75 | |
| | <hr/> | \$ 613.35 |

TELEPHONES.

| | | |
|---|-----------|-----------|
| Office | \$ 888.50 | |
| Health Officer's Residence..... | 68.85 | |
| Supt. Bureau Contagious Diseases—Residence..... | 37.15 | |
| | <hr/> | \$ 994.53 |

SUPPLIES.

| | | |
|-----------------------------------|--------|-------------|
| Sputum Cups..... | \$.60 | |
| Twine | 4.57 | |
| Bottles and Corks..... | 4.80 | |
| Rubber Hose (Smoke Machines)..... | 13.13 | |
| Lactometers | 7.00 | |
| Transfer Cases..... | 6.96 | |
| Radiograph | 8.00 | |
| Hardware | 13.91 | |
| Garden Hose..... | 10.25 | |
| Uniform Buttons..... | 15.00 | |
| Tungsten Incandescent Lamps..... | 31.50 | |
| Ice Plates..... | 32.50 | |
| Janitor Supplies..... | 56.22 | |
| Milk License Plates..... | 76.50 | |
| Printing and Stationery..... | 866.90 | |
| | <hr/> | \$ 1,147.84 |

FURNITURE.

| | | |
|---------------------------|---------|-------------|
| Slip Cover for Chair..... | \$ 1.75 | |
| Office Chairs (2)..... | 14.25 | |
| Desks (3)..... | 82.25 | |
| | <hr/> | \$ 98.25 |
| Total..... | | \$ 5,853.97 |

DISBURSEMENTS—SANITARY DIVISION.

| | |
|---------------------|-------------|
| Amount Forward..... | \$ 5,853.97 |
|---------------------|-------------|

BOARD OF HEALTH.

MISCELLANEOUS.

| | | |
|---|---------|-------------|
| Subscription, Municipal Journal..... | \$ 3.00 | |
| Inspectors' Badges..... | 3.25 | |
| Inspection Typewriting Machine..... | 6.00 | |
| Decorating Office Front..... | 12.00 | |
| Floral Design..... | 15.00 | |
| Commissioners' Badges..... | 24.00 | |
| Board of Inspector—Water Sheds..... | 40.50 | |
| Washing Towels and Curtains..... | 30.82 | |
| Garden—Flowers and Plants..... | 45.00 | |
| Petty Cash—Resolution..... | 100.00 | |
| Advertising Ordinances..... | 478.68 | |
| Reporting Contagious Diseases..... | 314.60 | |
| Expense Members Board of Health, Health Officer to Convention American Public Health Association, Washington, D. C..... | 560.00 | |
| Expenses Werner Runge—Convention Ameri- can Veterinarian Association, Chicago, Ill.... | 137.50 | |
| | <hr/> | \$ 1,770.35 |

REPAIRS—REAL ESTATE.

| | | |
|-----------------------|----------|----------|
| Plumbing | \$ 21.10 | |
| Carpenter Work..... | 11.02 | |
| Electric | 7.10 | |
| Locks and Keys..... | 3.90 | |
| Cleaning Carpets..... | 15.00 | |
| | <hr/> | \$ 58.12 |

PETTY CASH ACCOUNT.

| | | |
|--|---------|--|
| Flowers | \$ 6.00 | |
| Rubber Stamps and Pads..... | 8.50 | |
| Express | 9.40 | |
| Tuberculosis Sanitarium—Auto Hire, etc..... | 21.94 | |
| Sprinkling Street Front..... | 15.50 | |
| Smallpox Hospital—Labor and Incidentals... | 30.44 | |
| Mosquito Work—Incidentals..... | 36.40 | |
| Incidentals — Telephone, Newspapers, Tele- grams, Matches, etc..... | 34.78 | |

BOARD OF HEALTH.

31

| | | |
|---|--------|-------------|
| Transportation Inspector—Water Sheds..... | 74.00 | |
| Car Tickets..... | 172.70 | |
| Legislative Committee Expenses—Trenton, N. J. | 219.30 | |
| Postage Stamps..... | 321.48 | |
| | <hr/> | \$ 950.44 |
| Total..... | | \$ 8,632.88 |

MOSQUITO EXTERMINATION.

| | | |
|------------------------|---------|-------------|
| Hoe and Hook..... | \$ 1.25 | |
| Automatic Sprayer..... | 13.00 | |
| Fuel Oil..... | 399.44 | |
| Livery Hire..... | 816.93 | |
| | <hr/> | \$ 1,230.62 |

CITY DISPENSARY.

LIGHT AND HEAT.

| | | |
|---------------------|---------|-----------|
| Gas | \$ 4.00 | |
| Electric Light..... | 33.00 | |
| Coal | 256.75 | |
| | <hr/> | \$ 293.75 |

REPAIRS—REAL ESTATE.

| | | |
|---------------------|---------|-----------|
| Window Glass..... | \$ 1.25 | |
| Carpenter Work..... | 8.40 | |
| Electric Work..... | 20.59 | |
| Plumbing Work..... | 124.27 | |
| | <hr/> | \$ 154.51 |

SUPPLIES.

| | | |
|-------------------------------------|----------|-------------|
| Oil Cloth..... | \$.66 | |
| Rubber Stamps..... | 1.50 | |
| Muslin | 4.28 | |
| Disinfectants | 11.49 | |
| Directories | 12.00 | |
| Janitor Supplies..... | 21.34 | |
| Toweling | 24.49 | |
| Surgical Instruments and Gauze..... | 79.58 | |
| Vaccine | 415.00 | |
| Drugs | 3,414.13 | |
| | <hr/> | \$ 3,984.47 |

MISCELLANEOUS.

| | | |
|---|---------|-----------|
| Putting up and taking down Awnings..... | \$ 6.00 | |
| Washing Towels and Linen..... | 36.73 | |
| Ice | 42.62 | |
| Telephone Service..... | 93.30 | |
| | <hr/> | \$ 178.65 |

DISINFECTING CORPS.

| | | |
|------------------------------|---------|-------------|
| Packing | \$ 1.20 | |
| Oilers | 1.25 | |
| Rubber Spray..... | 1.25 | |
| Sputum Cups..... | 1.60 | |
| Screwdrivers | 2.10 | |
| Putty Knives..... | 2.50 | |
| Whisk Brooms..... | 2.50 | |
| Sponges | 2.60 | |
| Kerosene Oil..... | 3.62 | |
| Oil Cups..... | 3.75 | |
| Gauze | 4.50 | |
| Rubber Hose..... | 6.67 | |
| Bottles | 6.78 | |
| Repairing Regenerators..... | 16.50 | |
| Cotton Batting..... | 49.04 | |
| Printing and Stationery..... | 159.25 | |
| Disinfectants | 819.20 | |
| | <hr/> | \$ 1,084.31 |

SMALLPOX HOSPITAL—LIGHT, HEAT, ETC.

| | | |
|-----------------------|----------|-----------|
| Coal | \$ 12.50 | |
| Gas | 14.20 | |
| Water Rent..... | 7.50 | |
| Telephone | 74.04 | |
| Carting | 18.00 | |
| Plumbing Repairs..... | 55.25 | |
| | <hr/> | \$ 181.49 |

STABLE.

| | | |
|-----------------------------------|----------|--------|
| Sponges | \$ 1.23 | |
| Harness Supplies and Repairs..... | 7.65 | |
| Board of Horse..... | 16.00 | |
| Horseshoeing | 34.50 | |
| Wagon Repairs..... | 51.18 | |
| Hay and Feed..... | 254.35 | |
| | <hr/> \$ | 364.91 |

BACTERIOLOGICAL DIVISION.

SUPPLIES.

| | | |
|--|----------|----------|
| Hardware | \$ 1.20 | |
| Urinometers | 2.25 | |
| Centrifugal Tubes..... | 2.40 | |
| Tube Racks..... | 2.88 | |
| Cedar Oil..... | 3.60 | |
| Reed—for Swabs..... | 3.90 | |
| Drawing for Cut..... | 4.00 | |
| Paraffine Kettle..... | 4.50 | |
| Rubber Stoppers..... | 4.86 | |
| Filter Paper..... | 5.06 | |
| Antitoxin Vials..... | 6.25 | |
| Paraffine Wax..... | 7.75 | |
| Thermometers | 8.40 | |
| Analine Dyes..... | 8.65 | |
| Tubing | 13.82 | |
| Filtering Flasks..... | 22.32 | |
| Peptone | 22.50 | |
| Chemicals | 26.48 | |
| Culture Boxes..... | 28.93 | |
| Screw-top Cans..... | 34.27 | |
| Paper Boxes..... | 43.50 | |
| Wooden Boxes..... | 44.20 | |
| Special Screw-top Boxes..... | 52.74 | |
| Glassware, Dishes, Slides, Tubes, etc..... | 100.32 | |
| Guinea Pigs..... | 160.00 | |
| Incidentals, Postage, Expressage, etc..... | 184.20 | |
| Printing and Stationery..... | 255.41 | |
| Antitoxin Syringes..... | 795.00 | |
| | <hr/> \$ | 1,849.39 |

BOARD OF HEALTH.

REPAIRS.

| | | |
|--------------------------|---------|----------|
| Repairing Regulator..... | \$ 4.03 | |
| Repairing Incubator..... | 78.00 | |
| Plumbing | 16.79 | |
| | <hr/> | \$ 98.82 |

STABLES.

| | | |
|--|----------|-------------|
| Repairing Halter..... | \$.25 | |
| Halter Chains..... | 1.50 | |
| Trimming Horses' Feet..... | 2.50 | |
| Halters | 6.25 | |
| Surcingles | 9.00 | |
| Blankets | 18.00 | |
| Insurance "Antitoxin Horses"..... | 30.00 | |
| Horseshoeing | 108.00 | |
| Purchase of Horses (2)..... | 400.00 | |
| Board of Horses (5)—Diphtheria Antitoxin.. | 1,533.33 | |
| | <hr/> | \$ 2,108.83 |

SEPSIS AND TUBERCLE ANTITOXIN ACCOUNT.

| | | |
|--------------------------|----------|-----------|
| Horseshoeing | \$ 55.50 | |
| Board of Horses (3)..... | 900.00 | |
| | <hr/> | \$ 955.50 |

TUBERCULOSIS SANITARIUM—MAINTENANCE—
SUPPLIES.

LIGHT AND HEAT.

| | | |
|---------------------|-----------|-------------|
| Electric Light..... | \$ 995.40 | |
| Coal | 1,131.99 | |
| Wood | 28.75 | |
| | <hr/> | \$ 2,156.14 |

FOOD AND DRUG SUPPLIES.

| | | |
|------------------|----------|--|
| Ice Cream..... | \$ 21.60 | |
| Gauze | 172.00 | |
| Sputum Cups..... | 197.76 | |
| Drugs | 295.70 | |
| Fish | 313.07 | |

| | |
|--------------------|--------------------|
| Ice | 359.17 |
| Vegetables | 485.63 |
| Butter | 975.41 |
| Water Supply | 1,095.18 |
| Milk | 2,670.24 |
| Groceries | 3,764.21 |
| Meats | 4,896.10 |
| Eggs | 5,165.40 |
| | <hr/> \$ 20,411.47 |

REAL ESTATE AND REPAIRS.

| | |
|------------------------------------|-------------------|
| Stone Flagging | \$ 1.69 |
| Picture Moulding | 3.09 |
| Mason Material | 4.20 |
| Repairing Range | 10.83 |
| Flag Pole | 12.50 |
| Window Glass | 18.04 |
| Drain Pipe | 22.00 |
| Repairing Road | 28.00 |
| Awnings | 55.00 |
| Electrical Supplies | 87.81 |
| Boiler Repairs | 89.59 |
| Carpenter Work | 190.16 |
| Repairing Roof | 191.25 |
| Hardware, Steam Fitting, etc. | 221.43 |
| Paints and Oils | 229.08 |
| Plumbing | 266.54 |
| | <hr/> \$ 1,431.21 |

EQUIPMENT—FURNITURE.

| | |
|--------------------|-----------------|
| Clocks | \$ 3.69 |
| Linoleum | 16.88 |
| Ice Box | 14.50 |
| Curtains | 22.00 |
| Crash | 23.26 |
| Tables | 34.50 |
| Scrap Basket | .49 |
| Scarf | 1.10 |
| Oil Cloths | 1.73 |
| Rubber Mats | 3.75 |
| Buffet | 34.00 |
| Chairs | 223.30 |
| Dresser | 40.50 |
| | <hr/> \$ 419.70 |

BOARD OF HEALTH.

BEDS AND BEDDING.

| | | |
|-------------------|----------|-----------|
| Pillow Cases..... | \$ 11.82 | |
| Sheeting | 24.58 | |
| Bed Spreads..... | 24.71 | |
| Pillows | 29.70 | |
| Blankets | 73.60 | |
| Beds | 58.25 | |
| Mattresses | 80.75 | |
| Springs | 91.25 | |
| | <hr/> | \$ 394.66 |

CROCKERY, GLASSWARE, ETC.

| | | |
|------------------|----------|-----------|
| Crockery | \$ 65.20 | |
| Glassware | 37.14 | |
| Toweling | 36.64 | |
| Table Linen..... | 89.69 | |
| | <hr/> | \$ 228.67 |

KITCHEN UTENSILS.

| | | |
|-----------------------|--------|----------|
| Ice Pick..... | \$.50 | |
| Dust Pans..... | 3.14 | |
| Trays | 3.44 | |
| Spoons | 13.91 | |
| Knives and Forks..... | 14.72 | |
| Coffee Mill..... | 14.39 | |
| Cooking Utensils..... | 40.53 | |
| | <hr/> | \$ 90.63 |

LAUNDRY SUPPLIES.

| | | |
|----------------------|--------|-----------|
| Clothes Line..... | \$.78 | |
| Blueing | 1.10 | |
| Clothes Pins..... | 1.46 | |
| Grate | 2.00 | |
| Clothes Hampers..... | 2.38 | |
| Irons | 3.36 | |
| Wash Baskets..... | 3.96 | |
| Washing Soda..... | 5.00 | |
| Stove | 16.30 | |
| Ammonia | 16.70 | |
| Soap | 72.89 | |
| | <hr/> | \$ 125.93 |

JANITOR SUPPLIES.

| | | |
|----------------------|--------|-----------|
| Dust Pans..... | \$.34 | |
| Whisk Brooms..... | .86 | |
| Lye | 2.86 | |
| Pails | 2.35 | |
| Urinal Strainer..... | .60 | |
| Mop Wringer..... | 2.00 | |
| Coal Hods..... | 2.60 | |
| Ash Cans..... | 3.25 | |
| Dusters | 2.49 | |
| Scrub Brushes..... | 3.93 | |
| Garbage Cans..... | 4.32 | |
| Dutch Cleanser..... | 8.00 | |
| Floor Brushes..... | 27.53 | |
| Mop and Handles..... | 18.98 | |
| Brooms | 36.06 | |
| No-Dust | 43.17 | |
| | <hr/> | \$ 159.33 |

MISCELLANEOUS.

| | |
|----------------------------|--------|
| Tacks | \$.10 |
| Needles | .30 |
| Door Springs..... | .45 |
| Bath Mat..... | 1.05 |
| Spool Cotton..... | 1.10 |
| Wash Basins..... | 1.20 |
| Brass Hooks..... | 1.97 |
| Expressage | 2.10 |
| Rubber Mackintosh..... | 2.70 |
| Kerosene Oil..... | 3.30 |
| Phonograph Records..... | 3.35 |
| Shuffle-board Weights..... | 4.00 |
| Garden Seed..... | 4.30 |
| Stationery..... | 11.90 |
| Crude Oil..... | 16.47 |
| Toilet Paper..... | 45.50 |
| Cleaning Cesspools..... | 50.00 |
| Auto Hire..... | 60.00 |

BOARD OF HEALTH.

| | |
|---|-------------------|
| Cleaning Windows..... | 65.00 |
| Paper Napkins..... | 70.00 |
| Disinfectants | 100.85 |
| Incidentals (newspapers, car fare, etc.)..... | 177.64 |
| Livery Hire..... | 284.25 |
| Telephone Service..... | 409.80 |
| | <hr/> \$ 1,317.33 |

STABLE.

| | |
|-----------------------|-----------------|
| Harness Soap..... | \$.50 |
| Castile Soap..... | .50 |
| Hoof Dressing..... | .50 |
| Whisk Brooms..... | .35 |
| Polish | .50 |
| Rubber Bit..... | .75 |
| Chamois | 1.00 |
| Swabs | 1.00 |
| Sponges | 1.25 |
| Busters | 1.50 |
| Lanterns | 1.69 |
| Sweat Collars..... | .50 |
| Tie Straps..... | 1.85 |
| Gloves | 3.00 |
| Harness Supplies..... | 5.75 |
| Horse Blanket..... | 6.25 |
| Rubber Boots..... | 8.75 |
| Excavating | 10.22 |
| Depot Wagon..... | 125.00 |
| | <hr/> \$ 170.86 |

RECAPITULATION.

SALARIES.

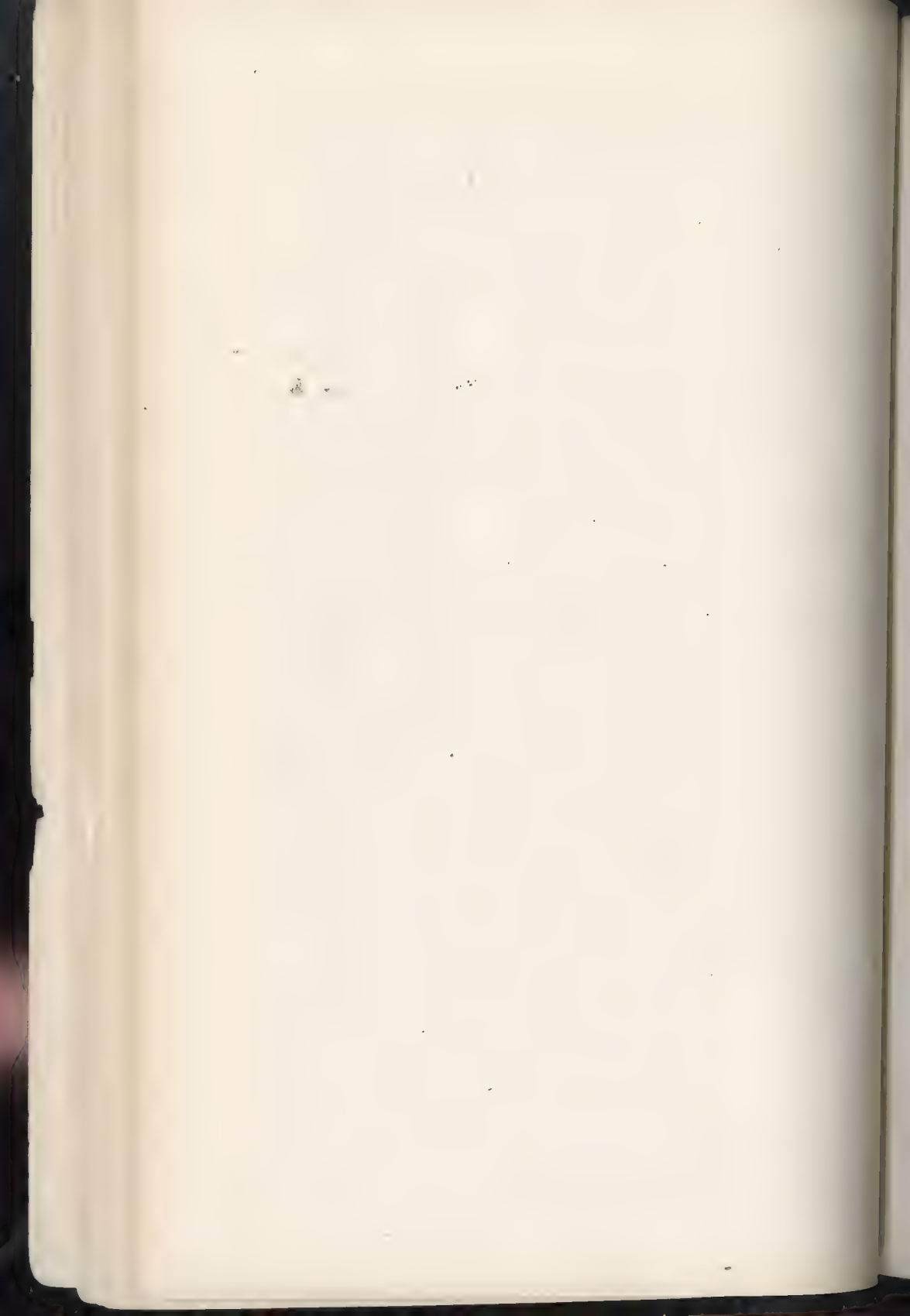
| | |
|--|--------------------|
| Sanitary Division..... | \$ 62,411.96 |
| Outdoor Poor Contingent—District Physicians. | 5,237.42 |
| Mosquito Extermination..... | 728.70 |
| Bacteriological Division..... | 8,295.00 |
| City Dispensary..... | 4,523.22 |
| Tuberculosis Sanitarium..... | 8,417.82 |
| | <hr/> \$ 89,614.12 |

SUPPLIES.

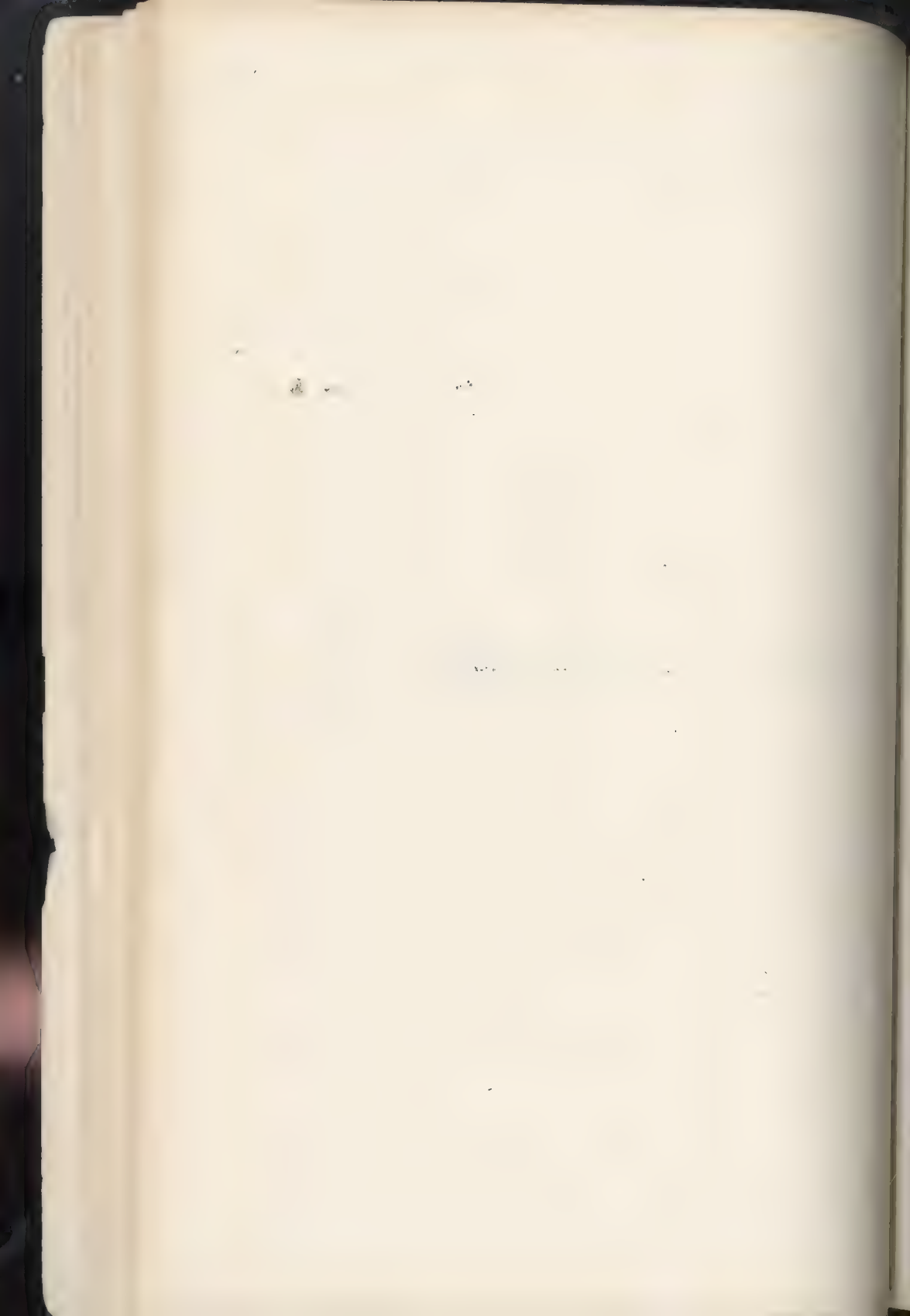
| | |
|--|--------------|
| Sanitary Division..... | \$ 8,632.88 |
| Mosquito Extermination..... | 1,230.62 |
| City Dispensary..... | 4,611.38 |
| Disinfecting Corps..... | 1,084.31 |
| Smallpox Hospital..... | 546.40 |
| Bacteriological Division..... | 4,057.04 |
| Sepsis and Tubercle Antitoxin account..... | 955.50 |
| Tuberculosis Sanitarium..... | 26,905.93 |
| | <hr/> |
| | \$ 48,024.06 |
| Total Disbursements..... | \$137,638.18 |

STATEMENT.

| | |
|---------------------------------|--------------|
| Assets | \$142,053.70 |
| Liabilities | 137,638.18 |
| Cash on Hand Dec. 31, 1909..... | 4,415.52 |
| | <hr/> |
| | \$142,053.70 |



REPORT
OF
Division of Bacteriology



REPORT OF DIVISION OF BACTERIOLOGY

To D. D. Chandler, Health Officer:

DEAR SIR:—Herewith is respectfully submitted the report of the Division of Bacteriology for the year ending December 31, 1909.

In reviewing the work of the year it is with some satisfaction that we are able to report that physicians have shown their reliance on the Laboratory and its products to a greater extent this year than any previous year.

The action of the Board in adopting the use of glass syringes for the distribution of antitoxin has met with uniform approval among physicians who find them a great convenience.

Another innovation by the Board which has thus far proved a very satisfactory one, is the establishing of the plant for the diagnosis and treatment of rabies, an action taken none too soon, as subsequent events indicate, because reports of rabid animals on the streets of Newark are becoming more common as the season advances.

It is, therefore, gratifying to report that the new year finds the laboratory equipped to diagnose or treat cases infected with rabies.

In the following table the various kinds of examinations, together with the production of antitoxin are given for the different months of 1909:

BACTERIOLOGICAL LABORATORY RECORD FOR 1909.

| | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
|-------------------------------|---------|------|------|-------|-----|------|------|------|-------|------|------|------|-------|
| Diphtheria examinations— | | | | | | | | | | | | | |
| Primary cultures----- | 322 | 319 | 326 | 282 | 260 | 184 | 177 | 138 | 181 | 357 | 468 | 584 | 3,598 |
| True cases----- | 87 | 98 | 75 | 43 | 51 | 43 | 53 | 56 | 56 | 123 | 132 | 142 | 959 |
| Total No. of cultures----- | 450 | 502 | 482 | 383 | 372 | 298 | 267 | 227 | 270 | 551 | 730 | 846 | 5,378 |
| Diphtheria antitoxin— | on hand | | | | | | | | | | | | |
| No. of doses produced----- | 606 | 344 | 661 | 267 | 400 | 0 | 0 | 281 | 273 | 733 | 807 | 561 | 4,127 |
| No. of doses distributed----- | 387 | 374 | 393 | 308 | 243 | 179 | 190 | 239 | 326 | 484 | 721 | 662 | 4,507 |
| Sepsis antitoxin— | | | | | | | | | | | | | |
| No. of doses produced----- | 120 | 170 | 172 | 297 | 335 | 0 | 0 | 410 | 0 | 0 | 365 | 0 | 1,869 |
| No. of doses distributed----- | 77 | 120 | 111 | 250 | 234 | 194 | 93 | 161 | 127 | 102 | 169 | 191 | 1,829 |
| Tubercle antitoxin— | | | | | | | | | | | | | |
| No. of doses produced----- | 54 | 0 | 136 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 111 | 0 | 301 |
| No. of doses distributed----- | 30 | 24 | 19 | 15 | 27 | 17 | 0 | 0 | 0 | 0 | 44 | 12 | 188 |
| Sputum examinations— | | | | | | | | | | | | | |
| Total No. of specimens----- | 190 | 204 | 246 | 256 | 230 | 239 | 188 | 158 | 183 | 216 | 203 | 208 | 2,521 |
| Tubercle bacilli found----- | 50 | 67 | 59 | 67 | 79 | 88 | 85 | 59 | 84 | 69 | 71 | 80 | 858 |
| Blood examinations----- | 60 | 68 | 73 | 69 | 73 | 57 | 83 | 128 | 138 | 110 | 112 | 82 | 1,053 |
| Water examinations----- | 22 | 22 | 11 | 11 | 22 | 22 | 22 | 28 | 25 | 21 | 22 | 12 | 240 |
| Milk examinations----- | 33 | 11 | 55 | 11 | 22 | 33 | 11 | 11 | 11 | 6 | 0 | 0 | 204 |
| Disinfection tests----- | 171 | 164 | 163 | 143 | 171 | 151 | 133 | 67 | 34 | 130 | 0 | 0 | 1,327 |

DIPHTHERIA AND ANTITOXIN.

During 1909 there were reported in Newark 1,393 cases of diphtheria. Of these 155 were removed to the Essex County Isolation Hospital at Soho, leaving 1,238 cases which were treated by the physicians of Newark. The records of cases treated in Newark show that 1,117 cases received antitoxin with a mortality of 64, or 5 7/10%. The records also show that 121 cases did **not** receive anti-toxin, and of these 41 died, or 33 8/10%. Even allowing for all possible errors this is a striking commentary.

The annexed table has been prepared to show the results of treating diphtheria with and without antitoxin during the last 16 years in Newark.

DIPHTHERIA.

| ANTITOXIN USED. | | | | ANTITOXIN NOT USED. | | | |
|-----------------|--------|---------|-----------|---------------------|--------|---------|-----------|
| YEAR. | CASES. | DEATHS. | PER CENT. | YEAR. | CASES. | DEATHS. | PER CENT. |
| 1895 | 384 | 52 | 13.5 | 1894 | 466 | 180 | 38.6 |
| 1896 | 905 | 106 | 11.7 | 1895 | 937 | 221 | 23.5 |
| 1897 | 563 | 61 | 10.8 | 1896 | 356 | 112 | 31.4 |
| 1898 | 646 | 68 | 10.5 | 1897 | 406 | 76 | 18.6 |
| 1899 | 798 | 70 | 8.7 | 1898 | 373 | 65 | 17.4 |
| 1900 | 987 | 80 | 8.1 | 1899 | 372 | 54 | 14.5 |
| 1901 | 956 | 58 | 6.0 | 1900 | 430 | 63 | 14.5 |
| 1902 | 775 | 61 | 7.8 | 1901 | 198 | 45 | 22.7 |
| 1903 | 953 | 71 | 7.4 | 1902 | 210 | 44 | 20.9 |
| 1904 | 1,399 | 95 | 6.7 | 1903 | 197 | 49 | 24.8 |
| 1905 | 1,421 | 82 | 5.7 | 1904 | 254 | 55 | 21.6 |
| 1906 | 1,171 | 72 | 6.1 | 1905 | 193 | 28 | 14.5 |
| 1907 | 913 | 64 | 7.0 | 1906 | 102 | 27 | 26.4 |
| 1908 | 726 | 41 | 6.7 | 1907 | 126 | 31 | 24.6 |
| 1909 | 1,117 | 64 | 5.7 | 1908 | 80 | 17 | 21.2 |
| | | | | 1909 | 121 | 41 | 33.8 |

In examining the laboratory records for the above statistics, it was noticed with some concern that in a large number of deaths from diphtheria the culture slip, antitoxin receipt

and death certificate all had the same date, with the information on the culture slip that the patient had been sick for several days. The interpretation of this is that the parents or guardians of the patient neglected to call in a physician until the child was in extremis—too late for antitoxin or any other human agency to be of any avail.

TUBERCULOSIS.

An analysis of the sputum work at the Laboratory has been made in the following report by Dr. T. H. Ripley, Assistant Bacteriologist:

To R. N. Connolly, M. D., Bacteriologist.

DEAR SIR:—The number of examinations made at the laboratory, of sputa from suspected cases of tuberculosis during the year 1909 exceeds that of any other year since the laboratory was established, the total number being 2,521, of which 858 contained tubercle bacilli.

The physicians for whom the examinations were made furnished data regarding the sex and age of 779 cases in which tubercle bacilli were found; 520 of these were male and 259 were female.

The following table will show the time of life in which the disease occurs:

| | |
|--------------------|-----|
| 1 to 10 years..... | 3 |
| 10 " 20 " | 57 |
| 20 " 30 " | 243 |
| 30 " 40 " | 246 |
| 40 " 50 " | 157 |
| 50 " 60 " | 49 |
| 60 and over..... | 24 |

779

It will be seen from the above that the greatest number of cases occur between the ages of 20 and 40, the most useful and active period of life.

The limited data furnished by the physicians show that in the 779 cases containing tubercle bacilli, 163, or nearly 21%, had consumption in the immediate family. Direct infection may have taken place in

this way. The occupation has undoubtedly a great influence on the number of cases occurring. Out of 572 cases in which the physician furnished positive data concerning the occupation, 469, or nearly 82%, were confined indoors, and only 103, or 18%, were found in those whose calling kept them out of doors in the sunshine and fresh air.

Respectfully submitted,

DR. T. H. RIPLEY,

Assistant Bacteriologist.

The following table gives the number of specimens examined for tubercle bacilli during the last 12 years, and shows the results obtained:

| YEAR. | POSITIVE. | NEGATIVE. | TOTAL. |
|-------|-----------|-----------|--------|
| 1898 | 312 | 378 | 690 |
| 1899 | 308 | 491 | 799 |
| 1900 | 380 | 623 | 1,003 |
| 1901 | 366 | 594 | 960 |
| 1902 | 796 | 746 | 1,542 |
| 1903 | 1,030 | 1,041 | 2,071 |
| 1904 | 804 | 959 | 1,763 |
| 1905 | 753 | 1,021 | 1,774 |
| 1906 | 740 | 1,385 | 2,125 |
| 1907 | 751 | 1,425 | 2,176 |
| 1908 | 727 | 1,380 | 2,107 |
| 1909 | 858 | 1,663 | 2,521 |

CITY WATER SUPPLY.

PEQUANNOCK.

Bacteriological examination of samples of the City Water Supply made during 1909 gave results which show that the water maintains its general average of high bacterial purity. Twenty-one series of samples were examined, each series consisting of eleven specimens, and the results are tabulated in the succeeding table:

BACTERIOLOGICAL EXAMINATIONS OF PEQUANNOCK WATER DURING 1909—Continued.

Samples from Oak Ridge Stream, above Clinton Stream.

| 1909 | Bact. Per C. C. | Amount of Sample Causing Fermentation in 5 C. C. Glucose Bouillon. | | | | | |
|----------|-----------------------|--|----|---|---|-------|-------|
| | | 1 | 1 | 1 | 1 | 1 | 5 |
| | | 20 | 10 | 5 | 2 | C. C. | C. C. |
| Jan. 12 | 1,370 | + | + | + | + | + | + |
| Jan. 26 | 2,250 | — | — | — | — | — | + |
| Feb. 9 | 740 | — | + | + | + | + | + |
| Feb. 24 | 1,670 | — | — | + | + | + | + |
| Mar. 23 | 1,470 | — | — | — | + | + | + |
| April 28 | 200 | — | — | — | — | + | + |
| May 12 | 450 | — | + | + | + | + | + |
| May 26 | 730 | + | + | + | + | + | + |
| June 9 | 1,270 | — | + | + | + | + | + |
| June 23 | 2,300 | + | + | + | + | + | + |
| July 14 | 1,160 | + | + | + | + | + | + |
| July 28 | 2,500 | + | + | + | + | + | + |
| Aug. 10 | 3,500 | + | + | + | + | + | + |
| Aug. 25 | 5,760 | + | + | + | + | + | + |
| Sept. 21 | 1,060 | — | + | + | + | + | + |
| Sept. 28 | 2,150 | + | + | + | + | + | + |
| Oct. 19 | 960 | — | + | + | + | + | + |
| Oct. 26 | 890 | — | — | — | + | + | + |
| Nov. 10 | 480 | — | — | — | — | + | + |
| Nov. 24 | 680 | — | — | — | — | + | + |
| Dec. 7 | 360 | — | — | — | — | + | + |

The sign (—) means no fermentation produced.

The sign (+) means fermentation produced.

BACTERIOLOGICAL EXAMINATIONS OF PEQUANNOCK WATER DURING 1909—Continued.

Samples from Clinton Stream, above Oak Ridge Stream.

| 1909 | Bact. Per C. C. | Amount of Sample Causing Fermentation in 5 C. C. Glucose Bouillon. | | | | | |
|---------------|-----------------------|--|----|---|---|-------|-------|
| | | 1 | 1 | 1 | 1 | 1 | 5 |
| | | 20 | 10 | 5 | 2 | C. C. | C. C. |
| Jan. 12..... | 800 | — | — | — | + | + | + |
| Jan. 26..... | 1,720 | — | — | — | — | — | + |
| Feb. 9..... | 800 | — | + | + | + | + | + |
| Feb. 24..... | 1,230 | — | — | — | — | + | + |
| Mar. 23..... | 860 | — | — | — | — | + | + |
| April 28..... | 190 | — | — | — | — | — | + |
| May 12..... | 220 | — | — | — | — | — | + |
| May 26..... | 340 | — | — | — | + | + | + |
| June 9..... | 790 | — | — | + | + | + | + |
| June 23..... | 2,700 | — | — | + | + | + | + |
| July 14..... | 1,350 | + | + | + | + | + | + |
| July 28..... | 2,800 | + | + | + | + | + | + |
| Aug. 10..... | 720 | — | — | — | + | + | + |
| Aug. 25..... | 3,150 | + | + | + | + | + | + |
| Sept. 21..... | 570 | — | — | + | + | + | + |
| Sept. 28..... | 1,800 | — | + | + | + | + | + |
| Oct. 19..... | 400 | — | — | + | + | + | + |
| Oct. 26..... | 940 | — | — | — | — | + | + |
| Nov. 10..... | 680 | — | — | — | — | + | + |
| Nov. 24..... | 1,780 | — | — | — | + | + | + |
| Dec. 7..... | 1,050 | — | — | — | + | + | + |

The sign (—) means no fermentation produced.

The sign (+) means fermentation produced.

BACTERIOLOGICAL EXAMINATIONS OF PEQUANNOCK WATER DURING 1909—Continued.

Samples from Kanouse Creek, above Pequannock River.

| 1909 | Bact. Per C. C. | Amount of Sample Causing Fermentation in 5 C. C. Glucose Bouillon. | | | | | |
|---------------|-----------------------|--|----|---|---|-------|-------|
| | | 1 | 1 | 1 | 1 | 1 | 5 |
| | | 20 | 10 | 5 | 2 | C. C. | C. C. |
| Jan. 12----- | 1,760 | + | + | + | + | + | + |
| Jan. 26----- | 5,500 | — | — | + | + | + | + |
| Feb. 9----- | 570 | — | — | — | + | + | + |
| Feb. 24----- | 2,300 | — | — | — | + | + | + |
| Mar. 23----- | 4,700 | + | + | + | + | + | + |
| April 28----- | 240 | — | — | — | + | + | + |
| May 12----- | 650 | — | — | — | + | + | + |
| May 26----- | 1,050 | — | + | + | + | + | + |
| June 9----- | 720 | + | + | + | + | + | + |
| June 23----- | 4,500 | + | + | + | + | + | + |
| July 14----- | 1,650 | + | + | + | + | + | + |
| July 28----- | 2,100 | + | + | + | + | + | + |
| Aug. 10----- | 1,870 | + | + | + | + | + | + |
| Aug. 25----- | 6,760 | + | + | + | + | + | + |
| Sept. 21----- | 780 | + | + | + | + | + | + |
| Sept. 28----- | 2,300 | + | + | + | + | + | + |
| Oct. 19----- | 570 | — | — | — | + | + | + |
| Oct. 26----- | 1,300 | — | — | — | — | + | + |
| Nov. 10----- | 9,600 | — | — | + | + | + | + |
| Nov. 24----- | 930 | — | — | — | — | + | + |
| Dec. 7----- | 1,260 | — | — | — | + | + | + |

The sign (—) means no fermentation produced.

The sign (+) means fermentation produced.

BACTERIOLOGICAL EXAMINATIONS OF PEQUANNOCK WATER DURING 1909—Continued.

Samples from Echo Lake Stream, above Pequannock River.

| 1909 | Bact. Per C. C. | Amount of Sample Causing Fermentation in 5 C. C. Glucose Bouillon. | | | | | |
|---------------|-----------------------|--|----|---|---|-------|-------|
| | | 1 | 1 | 1 | 1 | 1 | 5 |
| | | 20 | 10 | 5 | 2 | C. C. | C. C. |
| Jan. 12..... | 370 | + | + | + | + | + | + |
| Jan. 26..... | 330 | — | — | — | — | — | — |
| Feb. 9..... | 380 | — | — | — | — | — | + |
| Feb. 24..... | 2,100 | — | — | + | + | + | + |
| Mar. 23..... | 650 | — | — | — | — | — | — |
| April 28..... | 190 | — | — | — | — | — | — |
| May 12..... | 320 | — | — | — | + | + | + |
| May 26..... | 520 | — | — | — | + | + | + |
| June 9..... | 950 | + | + | + | + | + | + |
| June 23..... | 1,500 | + | + | + | + | + | + |
| July 14..... | 2,700 | + | + | + | + | + | + |
| July 28..... | 3,200 | — | + | + | + | + | + |
| Aug. 10..... | 1,260 | — | + | + | + | + | + |
| Aug. 25..... | 5,600 | — | + | + | + | + | + |
| Sept. 21..... | 670 | — | + | + | + | + | + |
| Sept. 28..... | 960 | — | — | — | — | + | + |
| Oct. 19..... | 420 | — | — | — | — | + | + |
| Oct. 25..... | 670 | — | — | — | + | + | + |
| Nov. 10..... | 430 | + | + | + | + | + | + |
| Nov. 24..... | 570 | — | — | — | — | — | — |
| Dec. 7..... | 280 | — | — | — | — | — | + |

The sign (—) means no fermentation produced.

The sign (+) means fermentation produced.

**BACTERIOLOGICAL EXAMINATIONS OF PEQUANNOCK
WATER DURING 1909—Continued.**

Samples from Macopin Intake at Gatehouse.

| 1909 | Bact. Per C. C. | Amount of Sample Causing Fermentation in 5 C. C. Glucose Bouillon. | | | | | |
|---------------|-----------------------|--|-----------|----------|----------|--------------|--------------|
| | | 1 | 1 | 1 | 1 | 1 | 5 |
| | | <u>20</u> | <u>10</u> | <u>5</u> | <u>2</u> | <u>C. C.</u> | <u>C. C.</u> |
| Jan. 12..... | 1,260 | + | + | + | + | + | + |
| Jan. 26..... | 3,500 | — | — | — | + | + | + |
| Feb. 9..... | 660 | — | — | — | + | + | + |
| Feb. 24..... | 1,860 | — | — | — | + | + | + |
| Mar. 23..... | 1,200 | — | — | — | — | + | + |
| April 28..... | 150 | — | — | — | — | + | + |
| May 12..... | 1,200 | — | + | + | + | + | + |
| May 26..... | 270 | — | — | — | + | + | + |
| June 9..... | 450 | — | — | — | + | + | + |
| June 23..... | 1,300 | + | + | + | + | + | + |
| July 14..... | 440 | + | + | + | + | + | + |
| July 28..... | 1,550 | + | + | + | + | + | + |
| Aug. 10..... | 650 | — | — | + | + | + | + |
| Aug. 25..... | 3,100 | + | + | + | + | + | + |
| Sept. 21..... | 930 | + | + | + | + | + | + |
| Sept. 28..... | 480 | — | — | + | + | + | + |
| Oct. 19..... | 460 | — | — | — | — | + | + |
| Oct. 26..... | 460 | — | — | — | — | + | + |
| Nov. 10..... | 420 | — | — | — | — | + | + |
| Nov. 24..... | 1,150 | — | — | — | — | + | + |
| Dec. 7..... | 770 | — | — | — | + | + | + |

The sign (—) means no fermentation produced.

The sign (+) means fermentation produced.

BACTERIOLOGICAL EXAMINATIONS OF PEQUANNOCK WATER DURING 1909—Continued.

Samples from Cedar Grove Reservoir at Inlet Gatehouse.

| 1909 | Bact. Per C. C. | Amount of Sample Causing Fermentation in 5 C. C. Glucose Bouillon. | | | | | |
|---------------|-----------------------|--|----|---|---|-------|-------|
| | | 1 | 1 | 1 | 1 | 1 | 5 |
| | | 20 | 10 | 5 | 2 | C. C. | C. C. |
| Jan. 12..... | 750 | — | + | + | + | + | + |
| Jan. 26..... | 3,750 | — | — | — | + | + | + |
| Feb. 9..... | 560 | — | — | — | — | — | + |
| Feb. 24..... | 740 | — | — | — | — | — | — |
| Mar. 23..... | 460 | — | — | — | — | + | + |
| April 28..... | 70 | — | — | — | — | + | + |
| May 12..... | 400 | — | — | — | + | + | + |
| May 26..... | 90 | — | — | — | + | + | + |
| June 9..... | 190 | — | — | — | + | + | + |
| June 23..... | 230 | — | — | — | + | + | + |
| July 14..... | 60 | — | — | — | + | + | + |
| July 28..... | 240 | — | — | — | — | + | + |
| Aug. 10..... | 430 | — | — | — | + | + | + |
| Aug. 25..... | 240 | — | — | + | + | + | + |
| Sept. 21..... | 250 | — | — | — | + | + | + |
| Sept. 28..... | 250 | — | — | — | — | + | + |
| Oct. 19..... | 50 | — | — | — | — | — | + |
| Oct. 26..... | 160 | — | — | — | — | — | — |
| Nov. 10..... | 330 | — | — | — | + | + | + |
| Nov. 24..... | 220 | — | — | — | — | + | + |
| Dec. 7..... | 240 | — | — | — | — | — | + |

The sign (—) means no fermentation produced.

The sign (+) means fermentation produced.

**BACTERIOLOGICAL EXAMINATIONS OF PEQUANNOCK
WATER DURING 1909—Continued.**

Samples from Cedar Grove Reservoir at Outlet Gatehouse.

| 1909 | Bact. Per C. C. | Amount of Sample Causing Fermentation in 5 C. C. Glucose Bouillon. | | | | | |
|----------|-----------------------|--|----|---|---|-------|-------|
| | | 1 | 1 | 1 | 1 | 1 | 5 |
| | | 20 | 10 | 5 | 2 | C. C. | C. C. |
| Jan. 12 | 590 | — | — | — | + | + | + |
| Jan. 26 | 1,020 | — | — | — | + | + | + |
| Feb. 9 | 320 | — | — | — | — | — | — |
| Feb. 24 | 530 | — | — | — | — | — | — |
| Mar. 23 | 240 | — | — | — | — | — | — |
| April 28 | 50 | — | — | — | — | — | — |
| May 12 | 110 | — | — | — | — | + | + |
| May 26 | 90 | — | — | — | — | + | + |
| June 9 | 70 | — | — | — | — | — | — |
| June 23 | 90 | — | — | — | — | + | + |
| July 14 | 250 | — | — | + | + | + | + |
| July 28 | 140 | — | — | — | — | — | — |
| Aug. 10 | 170 | — | — | — | + | + | + |
| Aug. 25 | 180 | — | — | — | + | + | + |
| Sept. 21 | 90 | — | — | — | + | + | + |
| Sept. 28 | 140 | — | — | — | — | — | — |
| Oct. 19 | 350 | — | — | — | — | — | — |
| Oct. 26 | 1,180 | — | — | — | — | + | + |
| Nov. 10 | 380 | — | — | — | — | + | + |
| Nov. 24 | 850 | — | — | — | — | — | — |
| Dec. 7 | 370 | — | — | — | — | — | + |

The sign (—) means no fermentation produced.

The sign (+) means fermentation produced.

BACTERIOLOGICAL EXAMINATIONS OF PEQUANNOCK
WATER DURING 1909—Continued.

Samples from Belleville Reservoir at Inlet Gatehouse.

| 1909 | Bact. Per C. C. | Amount of Sample Causing Fermentation in 5 C. C. Glucose Bouillon. | | | | | |
|---------------|-----------------------|--|----|---|---|-------|-------|
| | | 1 | 1 | 1 | 1 | 1 | 5 |
| | | 20 | 10 | 5 | 2 | C. C. | C. C. |
| Jan. 12..... | 1,360 | + | + | + | + | + | + |
| Jan. 26..... | 960 | — | — | — | — | + | + |
| Feb. 9..... | 430 | — | — | — | + | + | + |
| Feb. 24..... | 460 | — | — | — | — | + | + |
| Mar. 23..... | 170 | — | — | — | — | — | — |
| April 28..... | 80 | — | — | — | — | — | — |
| May 12..... | 110 | — | — | — | — | — | — |
| May 26..... | 80 | — | — | — | — | — | — |
| June 9..... | 100 | — | — | — | — | — | — |
| June 23..... | 30 | — | + | + | + | + | + |
| July 14..... | 50 | — | — | — | — | + | + |
| July 28..... | 53 | — | — | — | — | — | — |
| Aug. 10..... | 100 | — | — | — | + | + | + |
| Aug. 25..... | 190 | — | — | — | + | + | + |
| Sept. 21..... | 320 | — | — | — | + | + | + |
| Sept. 28..... | 470 | — | — | — | — | — | — |
| Oct. 19..... | 430 | — | — | — | — | + | + |
| Oct. 26..... | 520 | — | — | — | — | — | — |
| Nov. 10..... | 140 | — | — | — | — | + | + |
| Nov. 24..... | 250 | — | — | — | — | — | — |
| Dec. 7..... | 140 | — | — | — | — | — | — |

The sign (—) means no fermentation produced.

The sign (+) means fermentation produced.

**BACTERIOLOGICAL EXAMINATIONS OF PEQUANNOCK
WATER DURING 1909—Continued.**

Samples from Belleville Reservoir at Outlet Gatehouse.

| 1909 | Bact. Per C. C. | Amount of Sample Causing Fermentation in 5 C. C. Glucose Bouillon. | | | | | |
|---------------|-----------------------|--|----|---|---|-------|-------|
| | | 1 | 1 | 1 | 1 | 1 | 5 |
| | | 20 | 10 | 5 | 2 | C. C. | C. C. |
| Jan. 12..... | 970 | + | + | + | + | + | + |
| Jan. 26..... | 690 | — | — | — | — | + | + |
| Feb. 9..... | 510 | — | — | — | — | + | + |
| Feb. 24..... | 420 | — | — | — | + | + | + |
| Mar. 23..... | 130 | — | — | — | — | — | — |
| April 28..... | 90 | — | — | — | — | — | — |
| May 12..... | 60 | — | — | — | — | — | — |
| May 26..... | 140 | — | — | — | — | — | — |
| June 9..... | 54 | — | — | — | — | + | + |
| June 23..... | 40 | — | — | + | + | + | + |
| July 14..... | 90 | — | — | — | — | + | + |
| July 28..... | 53 | — | — | — | — | — | — |
| Aug. 10..... | 130 | — | — | — | — | + | + |
| Aug. 25..... | 910 | — | — | + | + | + | + |
| Sept. 21..... | 150 | — | — | — | — | + | + |
| Sept. 28..... | 200 | — | — | — | — | — | + |
| Oct. 26..... | 550 | — | — | — | — | + | + |
| Nov. 10..... | 280 | — | — | — | — | — | + |
| Nov. 24..... | 620 | — | — | — | — | — | + |
| Dec. 7..... | 230 | — | — | — | — | + | + |

The sign (—) means no fermentation produced.

The sign (+) means fermentation produced.

BACTERIOLOGICAL EXAMINATIONS OF PEQUANNOCK WATER DURING 1909—Continued.

Samples from Board of Health Office, 880 Broad Street.

| 1909 | Bact. Per C. C. | Amount of Sample Causing Fermentation in 5 C. C. Glucose Bouillon. | | | | | |
|---------------|-----------------------|--|-----------|----------|----------|--------------|--------------|
| | | 1 | 1 | 1 | 1 | 1 | 5 |
| | | <u>20</u> | <u>10</u> | <u>5</u> | <u>2</u> | <u>C. C.</u> | <u>C. C.</u> |
| Jan. 12----- | 440 | — | + | + | + | + | + |
| Jan. 26----- | 350 | — | — | — | — | — | + |
| Feb. 9----- | 220 | — | — | — | — | + | + |
| Feb. 24----- | 190 | — | — | — | — | + | + |
| Mar. 23----- | 40 | — | — | — | — | — | — |
| April 28----- | 24 | — | — | — | — | — | — |
| May 12----- | 75 | — | — | — | — | — | — |
| May 26----- | 50 | — | — | — | — | — | — |
| June 9----- | 12 | — | — | — | — | — | — |
| June 23----- | 40 | — | — | + | + | + | + |
| July 14----- | 20 | — | — | — | — | — | — |
| July 28----- | 22 | — | — | — | — | — | — |
| Aug. 10----- | 17 | — | — | — | — | — | — |
| Aug. 25----- | 70 | — | — | — | + | + | + |
| Sept. 21----- | 90 | — | — | — | — | + | + |
| Sept. 28----- | 90 | — | — | — | — | — | — |
| Oct. 19----- | 50 | — | — | — | — | — | — |
| Oct. 26----- | 16 | — | — | — | — | — | — |
| Nov. 10----- | 80 | — | — | — | + | + | + |
| Nov. 24----- | 80 | — | — | — | — | — | + |
| Dec. 7----- | 50 | — | — | — | — | — | — |

The sign (—) means no fermentation produced.

The sign (+) means fermentation produced.

**BACTERIOLOGICAL EXAMINATIONS OF PEQUANNOCK
WATER DURING 1909—Continued.**

Samples from Laboratory Faucet, City Hospital.

| 1909 | Bact. Per C. C. | Amount of Sample Causing Fermentation in 5 C. C. Glucose Bouillon. | | | | | |
|---------------|-----------------------|--|-----------|----------|----------|--------------|--------------|
| | | 1 | 1 | 1 | 1 | 1 | 5 |
| | | <u>20</u> | <u>10</u> | <u>5</u> | <u>2</u> | <u>C. C.</u> | <u>C. C.</u> |
| Jan. 12..... | 480 | — | — | + | + | + | + |
| Jan. 26..... | 470 | — | — | — | — | + | + |
| Feb. 9..... | 190 | — | — | — | — | + | + |
| Feb. 24..... | 240 | — | — | — | — | + | + |
| Mar. 23..... | 60 | — | — | — | — | — | — |
| April 28..... | 50 | — | — | — | — | — | — |
| May 12..... | 90 | — | — | — | — | — | — |
| May 26..... | 50 | — | — | — | — | — | — |
| June 9..... | 40 | — | — | — | — | — | — |
| June 23..... | 70 | — | — | — | — | — | + |
| July 14..... | 50 | — | — | — | — | — | + |
| July 28..... | 28 | — | — | — | — | — | — |
| Aug. 10..... | 17 | — | — | — | — | — | + |
| Aug. 25..... | 78 | — | — | — | — | + | + |
| Sept. 21..... | 78 | — | — | — | — | + | + |
| Sept. 28..... | 140 | — | — | — | — | + | + |
| Oct. 19..... | 40 | — | — | — | — | + | + |
| Oct. 27..... | 34 | — | — | — | — | + | + |
| Nov. 10..... | 130 | — | — | — | — | — | + |
| Nov. 24..... | 40 | — | — | — | — | — | — |
| Dec. 7..... | 100 | — | — | — | — | — | — |

The sign (—) means no fermentation produced.

The sign (+) means fermentation produced.

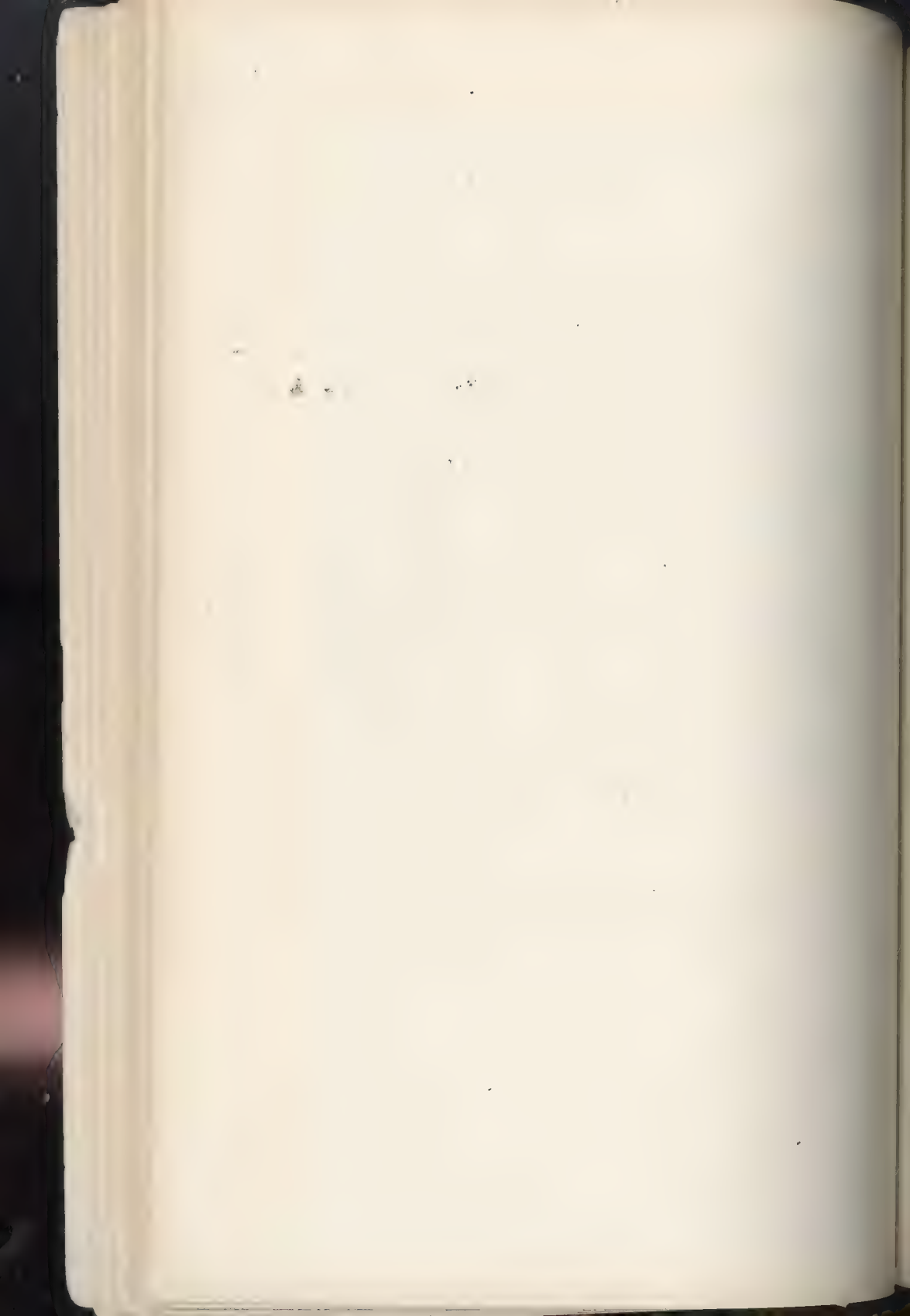
AVERAGE NUMBER OF BACTERIA PER CUBIC CENTI-
METER IN THE PEQUANNOCK WATER AT
THE SAMPLING POINTS FOR 1909.

| Origin of Samples. | No. of Samples Examined. | Average Bacteria Per C. C. |
|--|--------------------------------|----------------------------------|
| Oak Ridge Stream, above Clinton Stream | 21 | 1,521 |
| Clinton Stream, above Oak Ridge Stream | 21 | 1,147 |
| Kanouse Creek, above Pequannock River-- | 21 | 2,433 |
| Echo Lake Stream, above Pequannock River ----- | 21 | 1,146 |
| Macopin Intake at Gatehouse----- | 21 | 1,057 |
| Cedar Grove Reservoir at Inlet Gatehouse | 21 | 464 |
| Cedar Grove Reservoir at Outlet Gate- house ----- | 21 | 343 |
| Belleville Reservoir at Inlet Gatehouse--- | 21 | 311 |
| Belleville Reservoir at Outlet Gatehouse-- | 20 | 315 |
| Board of Health Office, 880 Broad Street-- | 21 | 95 |
| Laboratory Faucet, City Hospital----- | 21 | 117 |

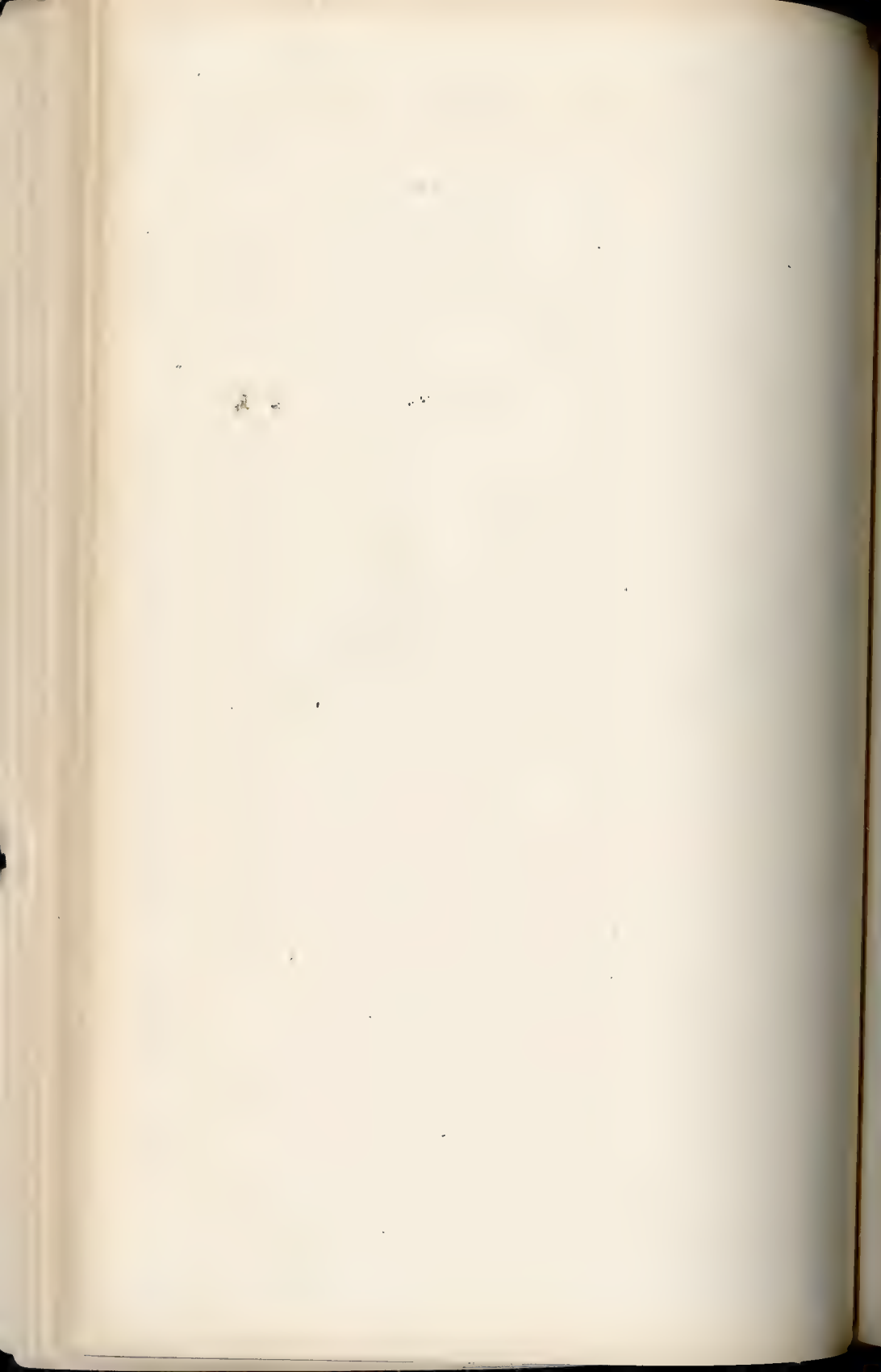
Very respectfully,

RICHARD N. CONNOLLY, M. D.,

Bacteriologist.



ANNUAL REPORT
OF THE
Bureau of Contagious Diseases
NEWARK BOARD OF HEALTH
FOR THE YEAR 1909
EDWARD E. WORL, M. D.



ANNUAL REPORT

OF THE

Bureau of Contagious Diseases

FOR THE YEAR 1909

To D. D. Chandler, Health Officer:

DEAR SIR:—I have the honor to present the following report of the Bureau Contagious Diseases for the year 1909:

OUR POPULATION.

The estimated population for the year 1909 was 311,000.
The population is distributed as follows:

| WARD. | POPULATION. |
|---------|-------------|
| 1..... | 13,804 |
| 2..... | 18,972 |
| 3..... | 27,936 |
| 4..... | 12,712 |
| 5..... | 13,306 |
| 6..... | 23,677 |
| 7..... | 28,974 |
| 8..... | 16,357 |
| 9..... | 13,156 |
| 10..... | 25,417 |
| 11..... | 17,704 |
| 12..... | 19,489 |
| 13..... | 16,650 |
| 14..... | 27,649 |
| 15..... | 18,228 |
| 16..... | 16,969 |
| | <hr/> |
| | 311,000 |

THE DEATH RATE.

The death rate for 1909 is fixed at 17.77 per thousand (with the exception of the year 1905 and 1908) the lowest for ten years.

The City death rate, excluding hospital mortality, is 12.77 per thousand of population. The following table compares these rates, beginning with 1894:

| YEAR. | POPULATION. | NO. OF DEATHS. | DEATH RATE. |
|-----------|-------------|----------------|-------------|
| 1894..... | 203,923 | 4,543 | 22.28 |
| 1895..... | 215,725 | 4,616 | 21.37 |
| 1896..... | 225,000 | 4,716 | 20.96 |
| 1897..... | 230,000 | 4,010 | 17.43 |
| 1898..... | 235,000 | 4,303 | 18.30 |
| 1899..... | 240,000 | 3,537 | 18.90 |
| 1900..... | 246,070 | 5,006 | 20.34 |
| 1901..... | 250,000 | 4,806 | 19.22 |
| 1902..... | 255,000 | 4,943 | 19.38 |
| 1903..... | 266,000 | 4,923 | 18.50 |
| 1904..... | 272,000 | 5,378 | 19.77 |
| 1905..... | 283,289 | 5,025 | 17.74 |
| 1906..... | 290,000 | 5,551 | 19.14 |
| 1907..... | 300,000 | 5,724 | 19.08 |
| 1908..... | 305,000 | 5,207 | 17.07 |
| 1909..... | 311,000 | 5,529 | 17.77 |

SCARLET FEVER.

During 1909 we had reported 1,786 cases and 70 deaths, a deathrate of 3.9%. Comparing with previous years we have:

| YEAR. | CASES. | DEATHS. |
|-----------|--------|---------|
| 1894..... | 1,145 | 69 |
| 1895..... | 623 | 35 |
| 1896..... | 537 | 17 |
| 1897..... | 1,358 | 54 |
| 1898..... | 478 | 15 |
| 1899..... | 607 | 34 |
| 1900..... | 708 | 55 |

BOARD OF HEALTH.

65

| | | |
|-----------|-------|-----|
| 1901..... | 643 | 23 |
| 1902..... | 557 | 46 |
| 1903..... | 779 | 71 |
| 1904..... | 1,649 | 120 |
| 1905..... | 1,309 | 45 |
| 1906..... | 616 | 34 |
| 1907..... | 773 | 41 |
| 1908..... | 1,500 | 89 |
| 1909..... | 1,786 | 70 |

The average mortality for 16 years—5.4%.

REPORTED CASES AND DEATHS BY MONTHS.

| MONTH. | CASES. | DEATHS. |
|-----------------|--------|---------|
| January | 177 | 4 |
| February | 153 | 6 |
| March | 270 | 9 |
| April | 205 | 7 |
| May | 208 | 15 |
| June | 117 | 2 |
| July | 63 | 1 |
| August | 48 | 1 |
| September | 63 | 3 |
| October | 90 | 1 |
| November | 177 | 8 |
| December | 215 | 13 |
| | <hr/> | <hr/> |
| | 1,786 | 70 |

Mortality for 1909—3.9%.

TYPHOID FEVER.

During 1909 we had reported 210 cases and 39 deaths, a mortality of 18.5-10%. Comparing with previous years we have.

| YEAR. | CASES. | DEATHS. |
|-----------|--------|---------|
| 1894..... | 89 | 34 |
| 1895..... | 149 | 50 |
| 1896..... | 106 | 47 |
| 1897..... | 103 | 33 |
| 1898..... | 179 | 41 |

| | | |
|-----------|-------------|-----------|
| 1899..... | 515 | 66 |
| 1900..... | 320 | 50 |
| 1901..... | 316 | 57 |
| 1902..... | 259 | 47 |
| 1903..... | 306 | 63 |
| 1904..... | 210 | 40 |
| 1905..... | 228 | 40 |
| 1906..... | 336 | 50 |
| 1907..... | 330 | 69 |
| 1908..... | 181 | 35 |
| 1909..... | 210 | 39 |
| | <hr/> 3,837 | <hr/> 761 |

The average mortality for 16 years is 19.8%. The deaths from Typhoid Fever are 12.54 to 100,000 of population.

REPORTED TYPHOID FEVER CASES AND DEATHS BY MONTHS.

| MONTH. | CASES. | DEATHS. |
|-----------------|-----------|----------|
| January | 5 | 3 |
| February | 9 | 3 |
| March | 14 | 4 |
| April | 12 | 1 |
| May | 13 | 4 |
| June | 10 | 2 |
| July | 13 | 2 |
| August | 32 | 2 |
| September | 35 | 5 |
| October | 38 | 7 |
| November | 16 | 3 |
| December | 13 | 3 |
| | <hr/> 210 | <hr/> 39 |

SMALLPOX.

During 1909 one case was reported followed by death. September, 1909. This year we burned the remaining buildings of our smallpox hospital; future cases to be cared for by our County Hospital. Our future statistics will probably

be based more on reported cases. The following table gives our record in this disease:

| YEAR. | CASES. | DEATHS. |
|-----------|-------------|-----------|
| 1894..... | 131 | 18 |
| 1895..... | 13 | 2 |
| 1896..... | 0 | 0 |
| 1897..... | 0 | 0 |
| 1898..... | 0 | 0 |
| 1899..... | 22 | 0 |
| 1900..... | 15 | 1 |
| 1901..... | 387 | 71 |
| 1902..... | 901 | 187 |
| 1903..... | 25 | 3 |
| 1904..... | 1 | 0 |
| 1905..... | 1 | 0 |
| 1906..... | 0 | 0 |
| 1907..... | 20 | 0 |
| 1908..... | 2 | 0 |
| 1909..... | 1 | 1 |
| | <hr/> 1,519 | <hr/> 283 |

Average mortality, 16 years, 18.6%.

VACCINATIONS AT CITY DISPENSARY—1909.

| | | | |
|----------------|-----|-----------------|-------|
| January | 35 | August | 105 |
| February | 24 | September | 126 |
| March | 30 | October | 126 |
| April | 105 | November | 55 |
| May | 604 | December | 40 |
| June | 106 | | |
| July | 45 | Total..... | 1,401 |

VACCINATIONS.

| | |
|-----------|--------|
| 1901..... | 28,288 |
| 1902..... | 26,043 |
| 1903..... | 4,671 |
| 1904..... | 5,555 |
| 1905..... | 8,243 |
| 1906..... | 3,052 |
| 1907..... | 1,954 |
| 1908..... | 1,540 |
| 1909..... | 1,401 |

DIPHTHERIA.

During 1909 we had reported 1,393 cases and 105 deaths.
A mortality of 7.5%.

DIPHTHERIA CASES AND DEATHS.

| YEAR. | CASES. | DEATHS. |
|-----------|--------|---------|
| 1895..... | 1,321 | 273 |
| 1896..... | 1,261 | 218 |
| 1897..... | 969 | 137 |
| 1898..... | 1,019 | 133 |
| 1899..... | 1,170 | 124 |
| 1900..... | 1,417 | 143 |
| 1901..... | 1,154 | 103 |
| 1902..... | 985 | 105 |
| 1903..... | 1,150 | 120 |
| 1904..... | 1,653 | 150 |
| 1905..... | 1,614 | 110 |
| 1906..... | 1,273 | 99 |
| 1907..... | 1,039 | 95 |
| 1908..... | 806 | 66 |
| 1909..... | 1,393 | 105 |

DIPHTHERIA—REPORTED CASES AND DEATHS BY MONTHS.

| MONTH. | CASES. | DEATHS. |
|-----------------|--------|---------|
| January | 120 | 10 |
| February | 120 | 14 |
| March | 124 | 5 |
| April | 73 | 6 |
| May | 69 | 8 |
| June | 77 | 4 |
| July | 69 | 1 |
| August | 77 | 8 |
| September | 89 | 9 |
| October | 175 | 11 |
| November | 211 | 13 |
| December | 189 | 16 |
| Total..... | 1,393 | 105 |

DIPHTHERIA (ANTITOXIN USED).

| YEAR. | CASES. | DEATHS. | PERCENTAGE. |
|-----------|--------|---------|-------------|
| 1895..... | 384 | 52 | 13 |
| 1896..... | 905 | 106 | 11 |
| 1897..... | 563 | 61 | 11 |
| 1898..... | 646 | 68 | 10 1-2 |
| 1899..... | 798 | 70 | 8 77-100 |
| 1900..... | 987 | 80 | 8 1-10 |
| 1901..... | 956 | 58 | 6 6-100 |
| 1902..... | 775 | 61 | 7 |
| 1903..... | 953 | 71 | 7 4-10 |
| 1904..... | 1,399 | 95 | 6 7-10 |
| 1905..... | 1,421 | 82 | 5 77-100 |
| 1906..... | 1,171 | 72 | 6 1-10 |
| 1907..... | 913 | 64 | 7 |
| 1908..... | 726 | 49 | 6 7-10 |
| 1909..... | 1,117 | 64 | 5 7-10 |

DIPHTHERIA (ANTITOXIN NOT USED).

| YEAR. | CASES. | DEATHS. | PERCENTAGE. |
|-----------|--------|---------|-------------|
| 1895..... | 937 | 221 | 23 |
| 1896..... | 356 | 112 | 31 |
| 1897..... | 406 | 76 | 19 |
| 1898..... | 373 | 65 | 17 1-2 |
| 1899..... | 372 | 54 | 14 1-2 |
| 1900..... | 430 | 63 | 14 6-10 |
| 1901..... | 198 | 45 | 22 7-10 |
| 1902..... | 210 | 44 | 19 |
| 1903..... | 197 | 49 | 24 87-100 |
| 1904..... | 254 | 55 | 21 65-100 |
| 1905..... | 193 | 28 | 14 5-10 |
| 1906..... | 102 | 27 | 26 4-10 |
| 1907..... | 126 | 31 | 24 6-10 |
| 1908..... | 80 | 17 | 21 2-10 |
| 1909..... | 121 | 41 | 33 8-10 |

Of the 1,393 reported cases, 155 were sent to Isolation Hospital and treated.

EPIDEMIC CEREBRO-SPINAL MENINGITIS.

In 1909 we had reported 8 cases and 7 deaths.

| MONTH. | CASES. | DEATHS. |
|-----------------|--------|---------|
| January | 0 | 2 |
| February | 1 | 0 |
| March | 1 | 1 |
| April | 0 | 1 |
| May | 1 | 1 |
| June | 2 | 0 |
| July | 0 | 2 |
| August | 1 | 0 |
| September | 1 | 0 |
| October | 0 | 1 |
| November | 0 | 0 |
| December | 1 | 0 |
| Total..... | 8 | 7 |

EPIDEMIC CEREBRO-SPINAL MENINGITIS.

| YEAR. | CASES. | DEATHS. |
|-----------|--------|---------|
| 1905..... | 110 | 90 |
| 1906..... | 25 | 20 |
| 1907..... | 55 | 38 |
| 1908..... | 11 | 11 |
| 1909..... | 8 | 7 |

VITAL STATISTICS.

The following is a summary of the chief statistics reported:

DEATHS—1909.

| | |
|---------------------|-------|
| Total Deaths..... | 5,529 |
| Tuberculosis | 764 |
| Diphtheria | 105 |
| Scarlet Fever..... | 70 |
| Typhoid Fever..... | 39 |
| Smallpox | 1 |
| Whooping Cough..... | 27 |

BOARD OF HEALTH. 71

| | |
|--------------------------------|----|
| Measles | 33 |
| Tetanus | 7 |
| Cerebro-Spinal Meningitis..... | 7 |

BIRTHS—1909.

| | |
|--------------------------|-------|
| White | 9,342 |
| Colored | 241 |
| Total..... | 9,583 |
| Rate per thousand, 30.8. | |

MARRIAGES—1909.

| | |
|--------------------------|-------|
| White | 3,965 |
| Colored | 189 |
| Yellow | 1 |
| Total..... | 4,155 |
| Rate per thousand, 13.3. | |

STILL BIRTHS—1909.

| | |
|--------------------------|-----|
| White | 400 |
| Colored | 14 |
| Not Stated..... | 0 |
| Total..... | 414 |
| Rate per thousand, 1.33. | |

DEATHS BY SEX—1909.

| | |
|--------------|-------|
| Male | 2,968 |
| Female | 2,561 |
| Total..... | 5,529 |

DEATHS BY COLOR—1909.

| | |
|---------------|-------|
| White | 5,310 |
| Colored | 217 |
| Yellow | 2 |
| Total | 5,529 |

TABLE MALE AND FEMALE DEATHS, AND DEATHS
BY COLOR—1909.

| 1909 | Male | Female | Total | White | Col'd | Y'llow | Total |
|----------------|-------|--------|-------|-------|-------|--------|-------|
| January ---- | 260 | 207 | 467 | 454 | 13 | --- | 467 |
| February ---- | 219 | 209 | 428 | 412 | 16 | --- | 428 |
| March ---- | 264 | 233 | 497 | 478 | 19 | --- | 497 |
| April ---- | 264 | 226 | 490 | 472 | 17 | --- | 490 |
| May ---- | 254 | 216 | 470 | 449 | 21 | 1 | 470 |
| June ---- | 199 | 165 | 364 | 346 | 18 | --- | 364 |
| July ---- | 245 | 179 | 424 | 403 | 21 | --- | 424 |
| August ---- | 271 | 198 | 469 | 450 | 19 | --- | 469 |
| September ---- | 202 | 218 | 420 | 399 | 21 | --- | 420 |
| October ---- | 250 | 234 | 484 | 470 | 14 | --- | 484 |
| November ---- | 233 | 217 | 450 | 434 | 16 | --- | 450 |
| December ---- | 307 | 259 | 566 | 543 | 22 | 1 | 566 |
| Totals---- | 2,968 | 2,561 | 5,529 | 5,310 | 217 | 2 | 5,529 |

DEATHS BY AGES—1909.

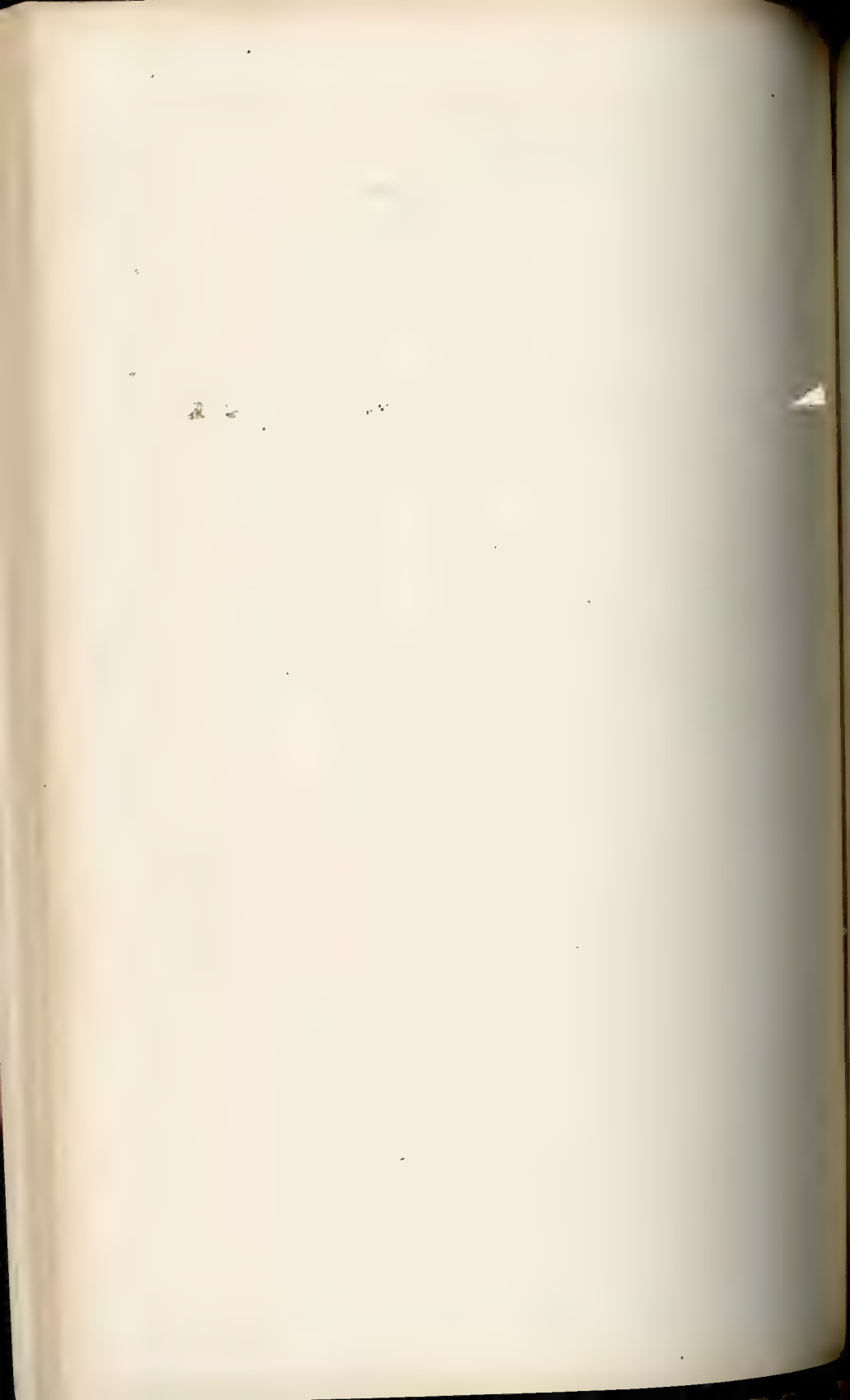
| 1909 | Under 1 Year | 1-2 Years | 2-5 Years | 5-20 Years | 20-60 Years | Ov'r 60 Years | Total |
|----------------|-----------------|--------------|--------------|---------------|----------------|------------------|-------|
| January ---- | 89 | 23 | 28 | 20 | 208 | 99 | 467 |
| February ---- | 65 | 19 | 28 | 28 | 190 | 98 | 428 |
| March ---- | 68 | 26 | 26 | 27 | 217 | 133 | 497 |
| April ---- | 71 | 30 | 20 | 24 | 196 | 149 | 490 |
| May ---- | 68 | 22 | 27 | 46 | 196 | 111 | 470 |
| June ---- | 76 | 14 | 14 | 26 | 152 | 82 | 364 |
| July ---- | 133 | 30 | 15 | 24 | 156 | 66 | 424 |
| August ---- | 149 | 33 | 22 | 23 | 161 | 81 | 469 |
| September ---- | 96 | 34 | 22 | 33 | 164 | 71 | 420 |
| October ---- | 100 | 41 | 25 | 37 | 167 | 114 | 484 |
| November ---- | 90 | 41 | 25 | 37 | 153 | 104 | 450 |
| December ---- | 106 | 54 | 42 | 43 | 208 | 113 | 566 |
| Totals---- | 1,111 | 367 | 294 | 368 | 2,168 | 1,221 | 5,529 |

TABLE MALE AND FEMALE DEATHS, AND DEATHS
BY COLOR—1909.

| 1909 | Male | Fem'le | Total | White | Col'rd | Y'llow | Total |
|---------------|-------|--------|-------|-------|--------|--------|-------|
| January ---- | 260 | 207 | 467 | 454 | 13 | ---- | 467 |
| February ---- | 219 | 209 | 428 | 412 | 16 | ---- | 428 |
| March ---- | 264 | 233 | 497 | 478 | 19 | ---- | 497 |
| April ---- | 264 | 226 | 490 | 472 | 17 | 1 | 490 |
| May ---- | 254 | 216 | 470 | 449 | 21 | ---- | 470 |
| June ---- | 199 | 165 | 364 | 346 | 18 | ---- | 364 |
| July ---- | 245 | 179 | 424 | 403 | 21 | ---- | 424 |
| August ---- | 271 | 198 | 469 | 450 | 19 | ---- | 469 |
| September -- | 202 | 218 | 420 | 399 | 21 | ---- | 420 |
| October ---- | 250 | 234 | 484 | 470 | 14 | ---- | 484 |
| November -- | 233 | 217 | 450 | 434 | 16 | ---- | 450 |
| December -- | 307 | 259 | 566 | 543 | 22 | 1 | 566 |
| Totals---- | 2,968 | 2,561 | 5,529 | 5,310 | 217 | 2 | 5,529 |

DEATHS BY AGES—1909.

| 1909 | Under 1 Year | 1-2 Years | 2-5 Years | 5-20 Years | 20-60 Years | Ov'r 60 Years | Total |
|---------------|-----------------|--------------|--------------|---------------|----------------|------------------|-------|
| January ---- | 89 | 23 | 28 | 20 | 208 | 99 | 467 |
| February ---- | 65 | 19 | 28 | 28 | 190 | 98 | 428 |
| March ---- | 68 | 26 | 26 | 27 | 217 | 133 | 497 |
| April ---- | 71 | 30 | 20 | 24 | 196 | 149 | 490 |
| May ---- | 68 | 22 | 27 | 46 | 196 | 111 | 470 |
| June ---- | 76 | 14 | 14 | 26 | 152 | 82 | 364 |
| July ---- | 133 | 30 | 15 | 24 | 156 | 66 | 424 |
| August ---- | 149 | 33 | 22 | 23 | 161 | 81 | 469 |
| September -- | 96 | 34 | 22 | 33 | 164 | 71 | 420 |
| October ---- | 100 | 41 | 25 | 37 | 167 | 114 | 484 |
| November -- | 90 | 41 | 25 | 37 | 153 | 104 | 450 |
| December -- | 106 | 54 | 42 | 43 | 208 | 113 | 566 |
| Totals---- | 1,111 | 367 | 294 | 368 | 2,168 | 1,221 | 5,529 |



CLASSIFIED
MORTUARY REPORT
1909

DIPHTHERIA BY WARDS, 1909.

| | | | |
|---------------|-----|----------------|-------|
| 1st Ward..... | 40 | 10th Ward..... | 119 |
| 2d " | 61 | 11th " | 95 |
| 3d " | 161 | 12th " | 64 |
| 4th " | 43 | 13th " | 84 |
| 5th " | 66 | 14th " | 174 |
| 6th " | 79 | 15th " | 95 |
| 7th " | 70 | 16th " | 17 |
| 8th " | 48 | | |
| 9th " | 40 | Total..... | 1,393 |

TYPHOID FEVER BY WARDS, 1909.

| | | | |
|---------------|----|----------------|-----|
| 1st Ward..... | 9 | 10th Ward..... | 11 |
| 2d " | 11 | 11th " | 13 |
| 3d " | 16 | 12th " | 13 |
| 4th " | 6 | 13th " | 12 |
| 5th " | 24 | 14th " | 13 |
| 6th " | 15 | 15th " | 20 |
| 7th " | 9 | 16th " | 18 |
| 8th " | 9 | | |
| 9th " | 11 | Total..... | 210 |

DEATHS IN HOSPITALS AND INSTITUTIONS, 1909.

| | |
|--------------------------------------|-----|
| Newark City Hospital..... | 565 |
| St. Michael's Hospital..... | 303 |
| St. James' Hospital..... | 99 |
| Babies' Hospital..... | 122 |
| St. Barnabas Hospital..... | 100 |
| German Hospital..... | 77 |
| Essex County Insane Asylum..... | 38 |
| Little Sisters of the Poor..... | 23 |
| Alms House..... | 40 |
| Hospital for Women and Children..... | 7 |
| Florence Crittenden Home..... | 2 |
| Home for Incurables..... | 15 |
| Homeopathic Hospital..... | 19 |
| Home for Aged Women..... | 17 |
| Home for Crippled Children..... | 4 |
| House of Good Shepherd..... | 8 |
| Baptist Home..... | 3 |
| Newark Private Hospital..... | 12 |
| Eye and Ear Infirmary..... | 6 |
| St. Mary's Orphan Asylum..... | 3 |
| Beth Israel Hospital..... | 70 |
| St. Peter's Orphan Asylum..... | 2 |
| Greisenheim | 4 |
| Hebrew Orphan Asylum..... | 2 |
| Home for Friendless..... | 1 |
| Dr. Wait's Sanitarium..... | 4 |
| In Ambulance..... | 10 |
| Continental Hotel..... | 1 |
| Monastery of St. Dominic..... | 1 |
| Hebrew Home..... | 1 |
| City Dispensary..... | 1 |

 1,550

Deaths in institutions equal 28.03% of the total city deaths, or 5 per thousand of our total death rate. Our city death rate, exclusive of hospital mortality is 12.77 per thousand of the population.

MORTUARY REPORT 1909.

| DISEASES. | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
|------------------------------|------|------|------|-------|-----|------|------|------|-------|------|------|------|-------|
| I. General Diseases. | | | | | | | | | | | | | |
| Typhoid Fever | 3 | 3 | 4 | 1 | 4 | 2 | 2 | 2 | 5 | 7 | 3 | 3 | 39 |
| Malaria | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Measles | 0 | 1 | 1 | 0 | 1 | 2 | 1 | 2 | 2 | 5 | 6 | 12 | 33 |
| Scarlet Fever | 4 | 6 | 9 | 7 | 15 | 2 | 1 | 1 | 3 | 1 | 8 | 13 | 70 |
| Whooping Cough | 3 | 0 | 3 | 2 | 4 | 2 | 2 | 2 | 2 | 2 | 4 | 1 | 27 |
| Diphtheria and Croup | 10 | 14 | 5 | 6 | 8 | 4 | 1 | 8 | 9 | 11 | 13 | 16 | 105 |
| Influenza | 5 | 3 | 2 | 4 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 5 | 22 |
| Dysentery | 0 | 0 | 1 | 1 | 0 | 0 | 6 | 1 | 4 | 1 | 0 | 0 | 14 |
| Erysipelas | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 3 | 11 |
| Rabies | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tuberculosis—Lungs | 59 | 60 | 61 | 63 | 64 | 39 | 39 | 39 | 46 | 47 | 35 | 44 | 596 |
| Tuberculosis—Larynx | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 6 |
| Tuberculosis—Meningeal | 6 | 5 | 6 | 11 | 8 | 6 | 11 | 3 | 7 | 5 | 4 | 5 | 77 |
| Tuberculosis—Abdominal | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 0 | 3 | 8 |
| General Tuberculosis | 4 | 6 | 4 | 6 | 7 | 4 | 7 | 4 | 3 | 6 | 4 | 4 | 59 |
| Pott's Disease | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 |
| Other forms Tuberculosis | 0 | 2 | 2 | 1 | 0 | 2 | 0 | 0 | 3 | 1 | 0 | 0 | 15 |
| Syphilis | 0 | 4 | 0 | 1 | 2 | 1 | 1 | 0 | 2 | 0 | 2 | 0 | 11 |
| Pur. Infect. and Septicæmia | 0 | 2 | 4 | 1 | 4 | 1 | 2 | 1 | 1 | 4 | 2 | 2 | 24 |
| Smallpox | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Cancer— | | | | | | | | | | | | | |
| Buccal Cavity | 0 | 1 | 4 | 2 | 0 | 2 | 3 | 2 | 1 | 2 | 2 | 2 | 21 |
| Stomach and Liver | 7 | 8 | 10 | 3 | 7 | 8 | 3 | 4 | 6 | 20 | 8 | 3 | 87 |
| Peritoneum Intestines Rectum | | | | | | | | | | | | | |
| Female Genital Organs | 2 | 2 | 4 | 2 | 1 | 6 | 3 | 4 | 5 | 4 | 3 | 3 | 39 |
| | | 1 | 2 | 3 | 2 | 1 | 4 | 4 | 7 | 4 | 5 | 1 | 39 |

| DISEASES. | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
|---------------------------------|------|------|------|-------|-----|------|------|------|-------|------|------|------|-------|
| Cancer—Continued | | | | | | | | | | | | | |
| Breast | 1 | 3 | 4 | 3 | 3 | 1 | 0 | 1 | 3 | 0 | 1 | 1 | 21 |
| Skin | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Organs not specified | 4 | 0 | 0 | 2 | 3 | 3 | 4 | 3 | 1 | 5 | 5 | 4 | 41 |
| Other Tumors | 0 | 3 | 3 | 3 | 3 | 4 | 2 | 1 | 2 | 3 | 0 | 0 | 24 |
| Acute Articular Rheumatism | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 1 | 0 | 1 | 6 |
| Chronic Rheumatism and Gout | 2 | 0 | 1 | 1 | 2 | 1 | 2 | 1 | 0 | 1 | 3 | 7 | 21 |
| Diabetes | 5 | 5 | 6 | 3 | 6 | 4 | 4 | 4 | 2 | 3 | 5 | 4 | 51 |
| Exophthalmic Goitre | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 4 |
| Lukaemia | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 |
| Anemia—Chlorosis | 0 | 1 | 5 | 2 | 0 | 3 | 0 | 0 | 2 | 2 | 0 | 1 | 16 |
| Acute and Chronic Alcoholism | 9 | 4 | 1 | 5 | 4 | 5 | 2 | 9 | 4 | 3 | 2 | 4 | 52 |
| Other General Diseases | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 |
| Chronic Lead Poisoning | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| II. Diseases Nervous System. | | | | | | | | | | | | | |
| Encephalitis | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Simple Meningitis | 4 | 10 | 5 | 7 | 1 | 4 | 14 | 11 | 12 | 8 | 3 | 6 | 85 |
| Epidemic Meningitis | 2 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 7 |
| Locomotor Ataxia | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 3 |
| Other diseases spinal chord. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 2 |
| Congestion and Hemorrhage Brain | 34 | 12 | 32 | 30 | 29 | 17 | 19 | 20 | 17 | 18 | 19 | 28 | 275 |
| Softening Brain | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 6 |

MORTUARY REPORT—1909—Continued.

| DISEASES. | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
|------------------------------------|------|------|------|-------|-----|------|------|------|-------|------|------|------|-------|
| Paralysis, without specified Cause | 2 | 1 | 4 | 2 | 4 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 23 |
| General Paralysis | 0 | 0 | 1 | 0 | 3 | 1 | 1 | 1 | 2 | 2 | 1 | 0 | 12 |
| Other forms Mental Alienation | 1 | 3 | 10 | 1 | 0 | 2 | 3 | 0 | 0 | 2 | 1 | 1 | 24 |
| Epilepsy | 2 | 0 | 1 | 0 | 2 | 2 | 0 | 0 | 0 | 2 | 1 | 1 | 11 |
| Convulsions (over 5 years) | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Convulsions (under 5 years) | 9 | 1 | 6 | 5 | 7 | 4 | 7 | 4 | 2 | 4 | 10 | 5 | 64 |
| Tetanus | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 2 | 7 |
| Chorea | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Other nervous diseases | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 13 |
| Diseases of the Eye | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diseases of the Ear | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| III. Diseases Circulatory System. | | | | | | | | | | | | | |
| Pericarditis | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 5 |
| Acute Endocarditis | 1 | 1 | 0 | 0 | 2 | 1 | 4 | 0 | 2 | 0 | 0 | 3 | 14 |
| Organic Diseases Heart | 40 | 51 | 43 | 56 | 54 | 28 | 30 | 35 | 31 | 40 | 52 | 62 | 522 |
| Angina Pectoris | 0 | 3 | 1 | 2 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 2 | 12 |
| Diseases Arteries— | | | | | | | | | | | | | |
| Aneurism | 2 | 0 | 2 | 2 | 0 | 1 | 1 | 0 | 2 | 4 | 2 | 2 | 18 |
| Embolism and Thrombosis | 5 | 2 | 0 | 3 | 2 | 0 | 1 | 3 | 1 | 5 | 1 | 4 | 27 |
| Diseases Veins— | | | | | | | | | | | | | |
| Phlebitis | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Hemorrhages | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 3 | 4 | 1 | 1 | 4 | 17 |
| Other Circulatory Diseases | 1 | 1 | 0 | 1 | 0 | 2 | 1 | 1 | 0 | 1 | 2 | 0 | 10 |

| DISEASES. | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
|--|------|------|------|-------|-----|------|------|------|-------|------|------|------|-------|
| IV. Diseases of Respiratory System. | | | | | | | | | | | | | |
| Diseases Larynx----- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 3 |
| Acute Bronchitis----- | 9 | 4 | 3 | 9 | 3 | 3 | 0 | 3 | 2 | 1 | 1 | 8 | 46 |
| Chronic Bronchitis----- | 0 | 4 | 6 | 1 | 7 | 5 | 0 | 2 | 2 | 2 | 2 | 3 | 34 |
| Broncho-Pneumonia----- | 18 | 19 | 20 | 22 | 7 | 7 | 8 | 10 | 17 | 32 | 44 | 72 | 276 |
| Pneumonia----- | 48 | 38 | 58 | 46 | 33 | 12 | 8 | 12 | 23 | 27 | 37 | 52 | 394 |
| Pleurisy----- | 2 | 1 | 3 | 0 | 1 | 4 | 1 | 1 | 3 | 2 | 0 | 2 | 20 |
| Congestion and Apoplexy of Lungs----- | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 |
| Gangrene of Lungs----- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asthma----- | 1 | 0 | 4 | 0 | 0 | 1 | 3 | 0 | 3 | 0 | 1 | 1 | 14 |
| Pulmonary Emphysema----- | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 |
| Other Respiratory Diseases----- | 1 | 8 | 1 | 4 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 18 |
| V. Diseases of Digestive System. | | | | | | | | | | | | | |
| Ulcer of Stomach----- | 2 | 2 | 2 | 2 | 0 | 1 | 0 | 0 | 0 | 2 | 1 | 3 | 15 |
| Other diseases of Stomach----- | 3 | 3 | 4 | 1 | 2 | 2 | 4 | 5 | 0 | 2 | 1 | 3 | 30 |
| Diarrhoea and Enteritis----- | 3 | 8 | 4 | 4 | 9 | 25 | 72 | 93 | 46 | 37 | 14 | 12 | 327 |
| Under 2 years----- | 3 | 3 | 1 | 2 | 4 | 2 | 9 | 5 | 6 | 2 | 1 | 2 | 39 |
| Over 2 years----- | | | | | | | | | | | | | |
| Hernia and Intestinal Obstruction----- | 2 | 2 | 5 | 6 | 3 | 2 | 4 | 8 | 0 | 0 | 5 | 3 | 40 |
| Cirrhosis of Liver----- | 8 | 6 | 5 | 8 | 7 | 6 | 5 | 6 | 9 | 10 | 10 | 3 | 83 |
| Appendicitis----- | 6 | 1 | 2 | 5 | 2 | 6 | 6 | 5 | 1 | 0 | 2 | 4 | 40 |

MORTUARY REPORT—1909—Continued.

| DISEASES. | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
|---|------|------|------|-------|-----|------|------|------|-------|------|------|------|-------|
| Other diseases of Liver----- | 0 | 1 | 2 | 3 | 1 | 4 | 1 | 0 | 1 | 4 | 1 | 2 | 20 |
| Other Digestive diseases----- | 1 | 0 | 0 | 2 | 0 | 0 | 3 | 0 | 1 | 2 | 0 | 1 | 10 |
| Diseases of Pharynx----- | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Simple Peritonitis----- | 0 | 0 | 0 | 1 | 2 | 2 | 3 | 0 | 1 | 2 | 1 | 1 | 13 |
| Diseases of Mouth----- | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Biliary Calculi----- | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| VI. Diseases Genito-Urinary System. | | | | | | | | | | | | | |
| Acute Nephritis----- | 7 | 6 | 8 | 6 | 5 | 4 | 5 | 2 | 9 | 6 | 4 | 5 | 67 |
| Bright's Disease----- | 33 | 30 | 35 | 41 | 29 | 17 | 15 | 30 | 20 | 28 | 27 | 30 | 335 |
| Other diseases of Kidneys----- | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 1 | 0 | 3 | 9 |
| Calculi Urinary Tract----- | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Diseases of Bladder----- | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 1 | 2 | 1 | 0 | 1 | 9 |
| Diseases Prostate----- | 0 | 1 | 0 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 6 |
| Cysts and Tumors Ovary----- | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| VII. Puerperal State | | | | | | | | | | | | | |
| Puerperal Hemorrhage----- | 1 | 2 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 5 |
| Other Accidents of Labor----- | 5 | 6 | 1 | 2 | 0 | 0 | 3 | 0 | 1 | 0 | 1 | 2 | 21 |
| Puerperal Septicaemia----- | 2 | 3 | 1 | 3 | 2 | 1 | 5 | 3 | 3 | 2 | 1 | 1 | 27 |
| Other Puerperal accidents----- | 1 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 1 | 3 | 2 | 11 |
| Puerperal Albumenuria and Convulsions----- | 0 | 1 | 1 | 0 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 13 |
| Accidents of Pregnancy----- | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |

BOARD OF HEALTH.

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| DISEASES. | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
|---------------------------------------|------|------|------|-------|-----|------|------|------|-------|------|------|------|-------|
| VIII. Diseases of the Skin. | | | | | | | | | | | | | |
| Gangrene----- | 2 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 7 |
| Furuncle--Carbuncle----- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Acute Abscess and Phlegmon----- | 2 | 1 | 2 | 1 | 3 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 13 |
| Other Diseases of Skin----- | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 4 |
| IX. Diseases of Organs of Locomotion. | | | | | | | | | | | | | |
| Rickets----- | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 5 |
| Arthritis----- | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Non-tubercular Diseases of Bones----- | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| X. Malformations. | | | | | | | | | | | | | |
| Congenital Malformations-- | 5 | 1 | 2 | 2 | 4 | 1 | 1 | 6 | 3 | 2 | 4 | 3 | 34 |
| XI. Early Infancy. | | | | | | | | | | | | | |
| Congenital Debility----- | 36 | 22 | 25 | 30 | 25 | 30 | 42 | 43 | 29 | 34 | 23 | 20 | 359 |
| Other Diseases of Infancy-- | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 1 | 2 | 5 | 2 | 16 |
| XII. Old Age. | | | | | | | | | | | | | |
| Senile Debility----- | 9 | 5 | 8 | 10 | 9 | 9 | 3 | 8 | 6 | 11 | 9 | 6 | 93 |
| XIII. External Causes. | | | | | | | | | | | | | |
| Suicide by-- | | | | | | | | | | | | | |
| Poison----- | 1 | 1 | 0 | 2 | 3 | 2 | 1 | 1 | 3 | 3 | 2 | 2 | 20 |
| Asphyxia----- | 1 | 4 | 0 | 4 | 1 | 1 | 2 | 1 | 0 | 3 | 3 | 0 | 20 |

MORTUARY REPORT—1909—Continued.

| DISEASES. | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
|-----------------------------------|------|------|------|-------|-----|------|------|------|-------|------|------|------|-------|
| Suicide by— | | | | | | | | | | | | | |
| Hanging | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 2 | 7 |
| Drowning | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 7 |
| Fire-arms | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 9 |
| Cutting Instruments | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 |
| Other Suicides | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Homicide | 0 | 3 | 2 | 0 | 2 | 1 | 1 | 3 | 0 | 1 | 1 | 0 | 14 |
| Fractures | 5 | 3 | 13 | 9 | 12 | 3 | 10 | 12 | 3 | 4 | 5 | 11 | 90 |
| Dislocations | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Burns and Scalds | 2 | 0 | 4 | 2 | 3 | 3 | 3 | 3 | 5 | 3 | 3 | 7 | 38 |
| Sunstroke | 0 | 0 | 0 | 0 | 0 | 11 | 3 | 1 | 0 | 0 | 0 | 0 | 15 |
| Electric Shock | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Accidental Drowning | 1 | 0 | 0 | 0 | 1 | 6 | 2 | 2 | 1 | 2 | 0 | 1 | 16 |
| Inanition | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Absorption of Gases | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 |
| Other Acute Poisons | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 2 | 3 | 6 | 3 | 20 |
| Other Accidental Traumatisms | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 3 | 2 | 0 | 1 | 1 | 9 |
| Other External Violence | 2 | 3 | 1 | 3 | 5 | 2 | 1 | 4 | 6 | 5 | 8 | 6 | 46 |
| XIV. Ill-defined Causes. | | | | | | | | | | | | | |
| Dropsy | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Causes Unspecified or Ill-defined | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Totals | 467 | 428 | 497 | 490 | 470 | 364 | 424 | 469 | 420 | 484 | 450 | 566 | 5,529 |

Respectfully submitted,

EDWARD E. WORL, M. D.,
For the Bureau of Contagious Diseases

REPORT
OF
Newark City Tuberculosis
Sanitorium

Verona, Essex County, New Jersey
For 1909

EDWARD E. WORL, M. D., Medical Director

ANNUAL REPORT

OF

Newark City Sanatorium for Tuberculosis

January 1, 1910.

To D. D. Chandler, *Health Officer*:

DEAR SIR:—I have the honor to present the following report of the work of the Newark City Sanatorium for Tuberculosis, Verona, N. J., for the year ending December 31, 1909.

The Sanatorium was opened for the reception of patients January 21, 1908. During 1908 there were admitted 129 patients, of whom 72 were discharged, leaving in the Institution January 1, 1909, 57 patients.

During 1909 there were 147 admissions and 154 patients discharged, leaving in the Institution January 1, 1910, 50 patients.

TABLE I.

| | |
|--|-------|
| Patients in Institution January 1, 1909..... | 57 |
| Patients Admitted, 1909..... | 147 |
| | ----- |
| | 204 |
| Patients Discharged, 1909..... | 154 |
| | ----- |
| Patients in Institution January 1, 1910..... | 50 |

TABLE V.

Gain and Loss of Weight.

| | 1908 | 1909 |
|--|-----------|------------|
| Patients who <i>gained</i> weight..... | 45 | 124 |
| Patients who <i>lost</i> weight..... | 9 | 8 |
| Total..... | 54 | 132 |
| | 1908 | 1909 |
| Average gain per patient..... | 13.9 lbs. | 14.53 lbs. |
| Average loss per patient..... | 5.2 | 4.6 |

TABLE VI.

Ages.

| | |
|---------------------|-----|
| Under 15 years..... | 7 |
| 15 to 20 years..... | 28 |
| 20 to 30 "..... | 61 |
| 30 to 40 "..... | 35 |
| 40 to 50 "..... | 18 |
| Over 50 "..... | 1 |
| Not stated..... | 4 |
| | 154 |

Eighty per cent. of the patients were between the ages of 15 years and 40 years.

TABLE VII.

Social Condition.

| | |
|------------------|-----|
| Married | 60 |
| Single | 80 |
| Widowed | 9 |
| Not stated | 5 |
| Total..... | 154 |

OCCUPATIONS.

| | MALE. | FEMALE. |
|----------------------|-------|---------|
| Stablemen | 1 | 0 |
| Toolmaker | 2 | 0 |
| Envelope Cutter..... | 1 | 0 |
| Collector | 1 | 0 |
| Laundry | 1 | 1 |
| Jeweler | 4 | 0 |
| Machinist | 4 | 0 |
| Bookkeeper | 2 | 1 |
| Range Work..... | 1 | 0 |
| Clerk | 12 | 1 |
| Plumber | 4 | 0 |
| Drug Clerk..... | 2 | 0 |
| School | 0 | 6 |
| Japanner | 1 | 0 |
| Saleswoman | 0 | 3 |
| Servant | 0 | 2 |
| Corset Cutter..... | 0 | 1 |
| Printer | 3 | 0 |
| Silver-plater | 1 | 0 |
| Driver | 4 | 0 |
| Shoemaker | 1 | 0 |
| Satchel-maker | 2 | 0 |
| Proofreader | 1 | 0 |
| Housework | 0 | 14 |
| Tailor | 3 | 0 |
| Car Cleaner..... | 1 | 0 |
| Letter Carrier..... | 1 | 0 |
| Cement work..... | 1 | 0 |
| Manicure | 0 | 1 |
| Cotton Spinner..... | 1 | 0 |
| Salesman | 1 | 0 |
| Engraver | 1 | 0 |
| Novelty Work..... | 2 | 1 |
| Foreman | 1 | 0 |
| Tobacco Dealer..... | 1 | 0 |
| Thread Works..... | 1 | 0 |
| Hatter | 4 | 0 |
| Iron Moulder..... | 1 | 0 |
| Nurse | 0 | 1 |
| Laborer | 3 | 0 |

| | MALE. | FEMALE. |
|-------------------------|-------|---------|
| Telephone Operator..... | 0 | |
| Carpet Cleaner..... | 1 | 2 |
| Bartender | 1 | 0 |
| Electric Works..... | 0 | 0 |
| Cigarmaker | 2 | 4 |
| Polisher | 2 | 0 |
| Stenographer | 0 | 0 |
| Painter | 1 | 1 |
| Plasterer | 1 | 0 |
| Errand Boy..... | 1 | 0 |
| Policemen | 3 | 0 |
| Grave Digger..... | 1 | 0 |
| Tinner | 2 | 0 |
| Carpenter | 1 | 0 |
| Chauffeur | 1 | 0 |
| Tailoress | 0 | 1 |
| Lather | 1 | 0 |
| Barber | 1 | 0 |
| Farmer | 1 | 0 |
| Electrician | 1 | 0 |
| Corset Inspector..... | 1 | 0 |
| Manufacturer | 1 | 0 |
| | — | — |
| | 93 | 39 |

| | |
|--------------------------------|-----|
| Total classified..... | 132 |
| Not classified..... | 22 |
| Total patients discharged..... | 154 |

It will be observed that I have adopted a very conservative attitude in stating any "cures," although these cures are easiest made in the case of true incipients. It is also easy to give the outward appearance of health by improving the general condition, but the pulmonary condition requires months before we can assure ourselves against the possibility of relapse, the tendency then is to take too short a time for the process of cure and to return to old habits and old conditions is simply to invite a relapse.

One hundred and twenty-four patients out of 132 gained in weight. Mere gain in weight then is no criterion.

The cost of maintenance is \$1.596 per day per patient. That we have shared in the increased cost of living, due to the high prices of essential articles, is shown by the fact that the actual food consumed by patients cost 57 7-10% of the entire expense of the Sanitorium during 1909.

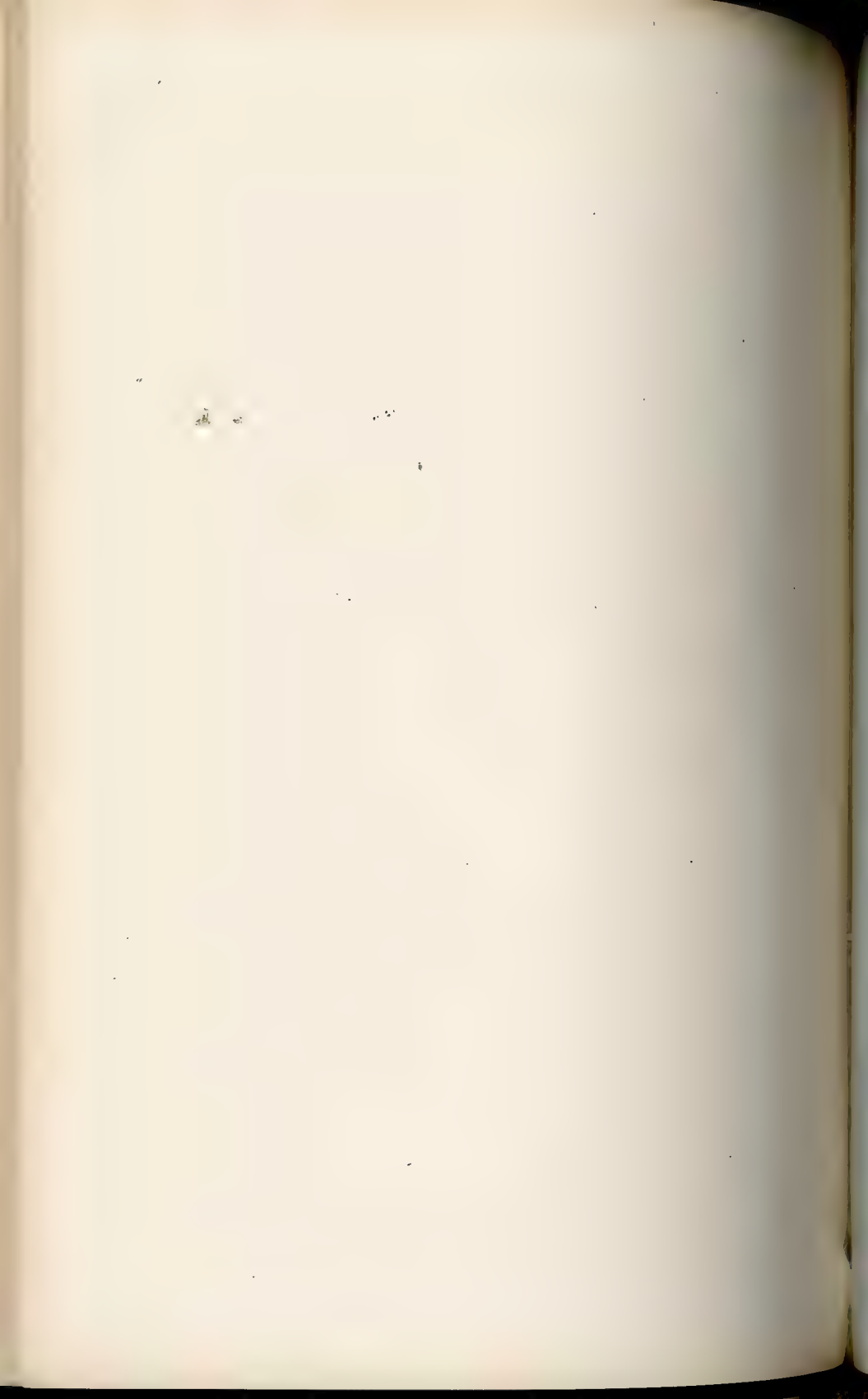
Trusting that the Sanitarium will be extended in usefulness in the near future, I thank the Matron and employees for their efficient aid.

Respectfully submitted,

EDWARD E. WORL, M. D.,

Medical Director.

N. C. T. Sanitorium, Verona, N. J.



Tuberculosis Sanitorium

REPORT, 1909

Verona, New Jersey

Tables I, II and III

**Condition, Result and number of days
treated in Institution**

E. E. WORL, M. D., Medical Director

TABLE I.

PATIENTS ADMITTED 1908, DISCHARGED IN 1909.

| No. of Patient | Diagnosis | Result | Days Treated 1908 | Days Treated 1909 | Total Days In Institution |
|----------------|-------------------|--------------|----------------------|----------------------|------------------------------|
| 42 | Mod. Adv. Tuberc. | Arrested | 216 | 26 | 242 |
| 43 | Mod. Adv. Tuberc. | Improved | 210 | 29 | 239 |
| 49 | Mod. Adv. Tuberc. | Appar. Cured | 204 | 52 | 256 |
| 52 | Advanced Tuberc. | Arrested | 204 | 51 | 255 |
| 53 | Mod. Adv. Tuberc. | Arrested | 198 | 12 | 210 |
| 56 | Advanced Tuberc. | Improved | 198 | 126 | 324 |
| 57 | Mod. Adv. Tuberc. | Appar. Cured | 190 | 31 | 221 |
| 60 | Mod. Adv. Tuberc. | Appar. Cured | 184 | 76 | 260 |
| 61 | Mod. Adv. Tuberc. | Appar. Cured | 175 | 28 | 203 |
| 64 | Mod. Adv. Tuberc. | Arrested | 175 | 72 | 247 |
| 65 | Incipient Tuberc. | Arrested | 171 | 59 | 230 |
| 66 | Mod. Adv. Tuberc. | Arrested | 163 | 2 | 165 |
| 69 | Advanced Tuberc. | Unimproved | 161 | 38 | 199 |
| 71 | Advanced Tuberc. | Improved | 156 | 79 | 235 |
| 74 | Advanced Tuberc. | Arrested | 156 | 114 | 270 |
| 75 | Mod. Adv. Tuberc. | Arrested | 156 | 66 | 222 |
| 79 | Advanced Tuberc. | Arrested | 146 | 50 | 196 |
| 80 | Mod. Adv. Tuberc. | Arrested | 127 | 147 | 274 |
| 83 | Advanced Tuberc. | Improved | 124 | 9 | 133 |
| 84 | Mod. Adv. Tuberc. | Appar. Cured | 125 | 40 | 165 |
| 85 | Mod. Adv. Tuberc. | Improved | 122 | 145 | 267 |
| 86 | Mod. Adv. Tuberc. | Appar. Cured | 112 | 50 | 162 |
| 87 | Mod. Adv. Tuberc. | Arrested | 112 | 31 | 143 |
| 88 | Advanced Tuberc. | Arrested | 105 | 63 | 168 |
| 89 | Advanced Tuberc. | Improved | 97 | 170 | 267 |
| 90 | Mod. Adv. Tuberc. | Arrested | 78 | 134 | 212 |
| 92 | Mod. Adv. Tuberc. | Unimproved | 68 | 58 | 126 |
| 95 | Incipient Tuberc. | Arrested | 65 | 27 | 92 |
| 96 | Advanced Tuberc. | Progressive | 64 | 172 | 236 |
| 97 | Incipient Tuberc. | Improved | 62 | 124 | 186 |
| 98 | Incipient Tuberc. | Appar. Cured | 58 | 90 | 148 |
| 102 | | | | | |

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TABLE I.—Continued.

| No. of Patient | Diagnosis | Result | Days Treated 1908 | Days Treated 1909 | Total Days In Institution |
|----------------|--------------------|--------------|----------------------|----------------------|------------------------------|
| 103 | Mod., Adv. Tuberc. | Improved | 57 | 138 | 195 |
| 106 | Mod. Adv. Tuberc. | Improved | 51 | 22 | 73 |
| 107 | Advanced Tuberc. | Improved | 48 | 118 | 166 |
| 108 | Mod. Adv. Tuberc. | Improved | 49 | 150 | 199 |
| 109 | Advanced Tuberc. | Unimproved | 44 | 79 | 123 |
| 110 | Mod. Adv. Tuberc. | Improved | 43 | 151 | 194 |
| 111 | Mod. Adv. Tuberc. | Improved | 41 | 141 | 182 |
| 113 | Mod. Adv. Tuberc. | Arrested | 37 | 124 | 161 |
| 114 | Incipient Tuberc. | Arrested | 36 | 137 | 173 |
| 115 | Mod. Adv. Tuberc. | Improved | 36 | 142 | 178 |
| 116 | Advanced Tuberc. | Arrested | 36 | 109 | 145 |
| 117 | Mod. Adv. Tuberc. | Arrested | 35 | 62 | 97 |
| 118 | Advanced Tuberc. | Improved | 35 | 158 | 193 |
| 119 | Incipient Tuberc. | Appar. Cured | 34 | 76 | 110 |
| 120 | Mod. Adv. Tuberc. | Arrested | 29 | 109 | 138 |
| 121 | Advanced Tuberc. | Improved | 28 | 153 | 181 |
| 122 | Advanced Tuberc. | Improved | 26 | 72 | 98 |
| 123 | Incipient Tuberc. | Improved | 24 | 158 | 182 |
| 124 | Mod. Adv. Tuberc. | Improved | 16 | 144 | 160 |
| 125 | Mod. Adv. Tuberc. | Arrested | 16 | 114 | 130 |
| 126 | Advanced Tuberc. | Unimproved | 15 | 12 | 27 |
| 127 | Mod. Adv. Tuberc. | Improved | 1 | 180 | 181 |
| 128 | Mod. Adv. Tuberc. | Improved | 2 | 139 | 141 |
| 129 | Mod. Adv. Tuberc. | Arrested | 2 | 118 | 120 |
| 28 | Advanced Tuberc. | Arrested | 233 | 50 | 283 |
| 67 | Incipient Tuberc. | Appar. Cured | 169 | 308 | 477 |

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BOARD OF HEALTH.

TABLE II.

PATIENTS ADMITTED AND DISCHARGED

| No. of Patient | Diagnosis | Result |
|----------------|-------------------|-------------|
| 130 | Mod. Adv. Tuberc. | Arrested |
| 131 | Mod. Adv. Tuberc. | Improved |
| 132 | Advanced Tuberc. | Unimproved |
| 133 | Mod. Adv. Tuberc. | Arrested |
| 134 | Mod. Adv. Tuberc. | Improved |
| 135 | Mod. Adv. Tuberc. | Arrested |
| 136 | Fr. Adv. Tuberc. | Unimproved |
| 137 | Fr. Adv. Tuberc. | Unimproved |
| 138 | Incipient Tuberc. | Improved |
| 139 | Mod. Adv. Tuberc. | Improved |
| 140 | Mod. Adv. Tuberc. | Arrested |
| 141 | Mod. Adv. Tuberc. | Improved |
| 142 | Advanced Tuberc. | Unimproved |
| 143 | Mod. Adv. Tuberc. | Unimproved |
| 144 | Incipient Tuberc. | Unimproved |
| 145 | Mod. Adv. Tuberc. | Improved |
| 146 | Advanced Tuberc. | Improved |
| 147 | Mod. Adv. Tuberc. | Arrested |
| 148 | Incipient Tuberc. | Appar. Cure |
| 149 | Advanced Tuberc. | Unimproved |
| 150 | Advanced Tuberc. | Unimproved |
| 151 | Advanced Tuberc. | Progressive |
| 152 | Advanced Tuberc. | Progressive |
| 153 | Mod. Adv. Tuberc. | Arrested |
| 154 | Advanced Tuberc. | Unimproved |
| 155 | Mod. Adv. Tuberc. | Improved |
| 156 | Advanced Tuberc. | Improved |
| 157 | Advanced Tuberc. | Unimproved |
| 158 | Mod. Adv. Tuberc. | Improved |
| 159 | Mod. Adv. Tuberc. | Unimproved |
| 160 | Mod. Adv. Tuberc. | Improved |
| 161 | Advanced Tuberc. | Unimproved |
| 162 | Advanced Tuberc. | Unimproved |
| 163 | Advanced Tuberc. | Unimproved |
| 164 | Incipient Tuberc. | Arrested |

TABLE II—Continued.

| No. of Patient | Diagnosis | Result | Days in Institution 1909 |
|----------------|-------------------|-------------|--------------------------|
| 165 | Mod. Adv. Tuberc. | Improved | 35 |
| 166 | Mod. Adv. Tuberc. | Unimproved | 2 |
| 167 | Advanced Tuberc. | Unimproved | 30 |
| 168 | Mod. Adv. Tuberc. | Arrested | 183 |
| 169 | Mod. Adv. Tuberc. | Arrested | 178 |
| 170 | Mod. Adv. Tuberc. | Improved | 91 |
| 171 | Advanced Tuberc. | Improved | 67 |
| 172 | Mod. Adv. Tuberc. | Arrested | 164 |
| 173 | Mod. Adv. Tuberc. | Arrested | 142 |
| 174 | Advanced Tuberc. | Progressive | 182 |
| 175 | Mod. Adv. Tuberc. | Arrested | 178 |
| 176 | Mod. Adv. Tuberc. | Unimproved | 69 |
| 177 | Advanced Tuberc. | Improved | 158 |
| 178 | Mod. Adv. Tuberc. | Unimproved | 170 |
| 179 | Mod. Adv. Tuberc. | Arrested | 183 |
| 180 | Advanced Tuberc. | Arrested | 182 |
| 181 | Incipient Tuberc. | Arrested | 168 |
| 182 | Advanced Tuberc. | Progressive | 110 |
| 183 | Incipient Tuberc. | Unimproved | 19 |
| 184 | Incipient Tuberc. | Arrested | 93 |
| 185 | Incipient Tuberc. | Arrested | 107 |
| 186 | Incipient Tuberc. | Improved | 38 |
| 187 | Incipient Tuberc. | Unimproved | 11 |
| 188 | Incipient Tuberc. | Unimproved | 32 |
| 189 | Incipient Tuberc. | Unimproved | 24 |
| 190 | Advanced Tuberc. | Unimproved | 12 |
| 191 | Incipient Tuberc. | Arrested | 115 |
| 192 | Comp. Tuberc. | Unimproved | 0 |
| 193 | Incipient Tuberc. | Arrested | 115 |
| 194 | Incipient Tuberc. | Arrested | 183 |
| 195 | Mod. Adv. Tuberc. | Improved | 176 |
| 196 | Incipient Tuberc. | Unimproved | 10 |
| 197 | Mod. Adv. Tuberc. | Improved | 185 |
| 198 | Incipient Tuberc. | Improved | 21 |
| 200 | Mod. Adv. Tuberc. | Improved | 78 |
| 201 | Incipient Tuberc. | Arrested | 184 |

3716

146

TABLE II—Continued.

| No. of Patient | Diagnosis | Result | Days in Institution 1909 |
|----------------|-------------------|-------------|--------------------------|
| 202 | Incipient Tuberc. | Improved | 171 |
| 203 | Incipient Tuberc. | Arrested | 153 |
| 204 | Incipient Tuberc. | Progressive | 100 |
| 205 | Incipient Tuberc. | Arrested | 158 |
| 206 | Incipient Tuberc. | Arrested | 143 |
| 208 | Incipient Tuberc. | Arrested | 81 |
| 210 | Incipient Tuberc. | Arrested | 93 |
| 212 | Incipient Tuberc. | Arrested | 105 |
| 213 | Mod. Adv. Tuberc. | Arrested | 139 |
| 214 | Incipient Tuberc. | Unimproved | 1 |
| 215 | Incipient Tuberc. | Improved | 88 |
| 216 | Incipient Tuberc. | Arrested | 113 |
| 217 | Incipient Tuberc. | Improved | 38 |
| 219 | Incipient Tuberc. | Arrested | 131 |
| 220 | Incipient Tuberc. | Arrested | 90 |
| 221 | Incipient Tuberc. | Improved | 65 |
| 222 | Advanced Tuberc. | Unimproved | 17 |
| 224 | Mod. Adv. Tuberc. | Arrested | 125 |
| 226 | Incipient Tuberc. | Unimproved | 52 |
| 233 | Incipient Tuberc. | Arrested | 90 |
| 235 | Incipient Tuberc. | Improved | 48 |
| 241 | Advanced Tuberc. | Unimproved | 12 |
| 245 | Advanced Tuberc. | Unimproved | 4 |
| 257 | Mod. Adv. Tuberc. | Unimproved | 39 |
| 261 | Incipient Tuberc. | Unimproved | 35 |
| 272 | Mod. Imp. Tuberc. | Unimproved | 7 |

2048

TABLE III.
PATIENTS ADMITTED 1909; REMAINING IN INSTITUTION
JANUARY 1, 1910.

| No. of Patient | Diagnosis | No. of Days Treated in 1909 |
|----------------|-------------------|--------------------------------|
| 199 | Mod. Adv. Tuberc. | 197 |
| 207 | Advanced Tuberc. | 177 |
| 209 | Incipient Tuberc. | 169 |
| 211 | Mod. Adv. Tuberc. | 164 |
| 218 | Mod. Adv. Tuberc. | 148 |
| 223 | Incipient Tuberc. | 142 |
| 225 | Advanced Tuberc. | 130 |
| 227 | Mod. Adv. Tuberc. | 128 |
| 228 | Comp. Tuberc. | 126 |
| 229 | Incipient Tuberc. | 128 |
| 230 | Mod. Adv. Tuberc. | 115 |
| 231 | Incipient Tuberc. | 114 |
| 232 | Incipient Tuberc. | 114 |
| 234 | Incipient Tuberc. | 105 |
| 236 | Incipient Tuberc. | 105 |
| 237 | Mod. Adv. Tuberc. | 101 |
| 238 | Mod. Adv. Tuberc. | 101 |
| 239 | Advanced Tuberc. | 100 |
| 240 | Incipient Tuberc. | 100 |
| 242 | Mod. Adv. Tuberc. | 94 |
| 243 | Advanced Tuberc. | 93 |
| 244 | Advanced Tuberc. | 93 |
| 246 | Incipient Tuberc. | 87 |
| 247 | Comp. Tuberc. | 85 |
| 248 | Mod. Adv. Tuberc. | 75 |
| 249 | Incipient Tuberc. | 74 |
| 250 | Advanced Tuberc. | 65 |
| 251 | Advanced Tuberc. | 65 |
| 252 | Incipient Tuberc. | 60 |
| 253 | Incipient Tuberc. | 59 |
| 254 | Mod. Adv. Tuberc. | 59 |
| 255 | Incipient Tuberc. | 55 |
| 256 | Mod. Adv. Tuberc. | 55 |
| 258 | Advanced Tuberc. | 53 |
| 259 | Incipient Tuberc. | 53 |

3589 159 168

TABLE III—Continued.

| No. of Patient | Diagnosis | No. of Days Treated in 1909 |
|----------------|-------------------|--------------------------------|
| 260 | Mod. Adv. Tuberc. | 50 |
| 262 | Comp. Tuberc. | 43 |
| 263 | Incipient Tuberc. | 41 |
| 264 | Incipient Tuberc. | 41 |
| 265 | Mod. Adv. Tuberc. | 39 |
| 266 | Incipient Tuberc. | 39 |
| 267 | Incipient Tuberc. | 32 |
| 268 | Mod. Adv. Tuberc. | 25 |
| 269 | Advanced Tuberc. | 25 |
| 270 | Incipient Tuberc. | 23 |
| 271 | Advanced Tuberc. | 18 |
| 273 | Incipient Tuberc. | 12 |
| 274 | Incipient Tuberc. | 7 |
| 275 | Incipient Tuberc. | 5 |
| 276 | Incipient Tuberc. | 2 |

62

402

3161

3181

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31

50.65

Report of the Chemist

REPORT OF THE CHEMIST

To D. D. Chandler, Health Officer:

DEAR SIR:—I herewith submit my annual report for the year ending December 31, 1909:

MILK.

The statistics relating to milk examination for the year have been tabulated as usual and the tables follow:

Reference to the comparison table will show that the average quality of milk in the different classes is fully up to that of former years, although the relative number of milks in each class has changed materially, the tendency being toward an increase in the amount of low grade milk.

As noticed in recent years, the poor quality of the milk below the standard is due much more to deficiency of fat (probably largely the result of partial skimming) than to the addition of water, and one-half of all our milk samples going below 12% of total Solids did not contain more than 3% of fat, although most of them were above 2.50%.

No formaldehyde was found in any of the samples tested this year.

CLASSIFIED TABLE OF MILK ANALYSIS.

132 Samples having a percentage of Total Solids of 12.50 and over.
Average for Solids, 13.24. Average for Fat, 4.13.

| Solids | Fat | Solids | Fat | Solids | Fat | Solids | Fat | Solids | Fat | Solids | Fat | Solids | Fat |
|--------|------|--------|------|--------|------|--------|------|--------|------|--------|------|--------|------|
| 12.52 | 3.80 | 12.55 | 4.00 | 13.49 | 4.00 | 13.00 | 4.40 | 12.57 | 3.90 | 12.84 | 3.60 | 12.84 | 3.60 |
| 12.59 | 4.00 | 13.22 | 4.10 | 12.70 | 3.50 | 12.61 | 3.90 | 12.77 | 3.80 | 12.51 | 3.60 | 12.77 | 3.80 |
| 12.58 | 3.80 | 12.64 | 3.75 | 14.10 | 5.50 | 12.87 | 3.70 | 13.03 | 4.10 | 13.84 | 4.30 | 13.03 | 4.10 |
| 13.47 | 4.30 | 12.61 | 4.35 | 12.89 | 3.70 | 13.21 | 4.20 | 13.14 | 4.40 | 13.05 | 4.00 | 13.14 | 4.40 |
| 13.70 | 4.20 | 12.85 | 4.50 | 12.60 | 3.80 | 12.64 | 3.50 | 12.50 | 3.70 | 12.65 | 4.00 | 12.50 | 3.70 |
| 12.51 | 4.05 | 12.95 | 4.40 | 12.87 | 4.00 | 13.12 | 4.00 | 14.05 | 5.20 | 12.61 | 3.60 | 14.05 | 5.20 |
| 13.27 | 3.80 | 12.62 | 3.50 | 13.61 | 4.75 | 13.04 | 3.70 | 12.82 | 4.20 | 12.93 | 3.60 | 12.82 | 4.20 |
| 13.33 | 3.80 | 13.59 | 5.10 | 12.76 | 4.20 | 12.81 | 4.50 | 12.83 | 3.80 | 14.00 | 4.20 | 12.83 | 3.80 |
| 12.71 | 3.85 | 13.67 | 5.20 | 12.52 | 4.00 | 12.61 | 3.40 | 14.40 | 5.85 | 13.41 | 3.60 | 14.40 | 5.85 |
| 13.01 | 3.95 | 13.19 | 4.50 | 13.27 | 4.00 | 13.23 | 4.70 | 16.30 | 6.00 | 13.43 | 3.85 | 13.23 | 4.70 |
| 12.87 | 3.95 | 14.26 | 5.70 | 12.77 | 4.00 | 12.74 | 4.20 | 12.53 | 3.20 | 12.90 | 3.70 | 12.74 | 4.20 |
| 13.69 | 4.50 | 12.70 | 3.40 | 13.58 | 4.10 | 12.98 | 3.80 | 13.67 | 4.40 | 12.92 | 3.90 | 12.98 | 4.40 |
| 12.93 | 3.80 | 12.78 | 3.95 | 12.56 | 3.40 | 13.04 | 5.60 | 14.15 | 4.60 | 13.29 | 4.10 | 13.04 | 5.60 |
| 13.16 | 4.20 | 14.10 | 7.00 | 12.54 | 3.60 | 13.28 | 4.20 | 12.67 | 4.10 | 13.21 | 3.70 | 13.28 | 4.20 |
| 12.81 | 4.10 | 13.07 | 3.95 | 14.02 | 5.25 | 14.30 | 5.75 | 12.69 | 4.00 | 13.36 | 3.75 | 14.30 | 5.75 |
| 12.75 | 4.00 | 13.32 | 3.70 | 12.57 | 3.80 | 12.96 | 4.00 | 13.02 | 4.00 | 13.71 | 4.40 | 12.96 | 4.00 |
| 15.15 | 6.05 | 13.08 | 3.90 | 12.51 | 3.40 | 12.91 | 3.90 | 13.00 | 3.70 | 12.66 | 3.60 | 12.91 | 3.90 |
| 12.70 | 4.00 | 12.70 | 3.50 | 12.57 | 3.80 | 13.44 | 4.90 | 12.57 | 3.45 | 13.61 | 4.00 | 13.44 | 4.90 |
| 12.89 | 3.60 | 17.96 | 8.90 | 12.56 | 3.40 | 12.89 | 4.60 | 12.75 | 3.80 | 13.91 | 4.00 | 12.89 | 4.60 |
| 12.62 | 3.85 | 13.61 | 3.95 | 13.97 | 5.30 | 16.29 | 8.40 | 16.42 | 7.40 | 12.89 | 3.55 | 16.29 | 8.40 |
| 13.11 | 3.85 | 12.70 | 4.20 | 12.95 | 4.10 | 15.98 | 8.40 | 15.93 | 7.00 | 12.53 | 3.60 | 15.98 | 8.40 |
| 13.41 | 4.40 | 12.58 | 3.60 | 13.83 | 5.50 | 12.84 | 4.10 | 13.15 | 4.00 | 13.10 | 4.20 | 13.15 | 4.00 |

CLASSIFIED TABLE OF MILK ANALYSES—Continued.

120 Samples having a percentage of Total Solids between 12.00 and 12.50.
Average for Solids, 12.24. Average for Fat, 3.53.

| Solids | Fat | Solids | Fat | Solids | Fat | Solids | Fat | Solids | Fat | Solids | Fat | Solids | Fat | Solids | Fat | Solids | Fat | Solids | Fat | Solids | Fat | Solids | Fat |
|--------|------|--------|------|--------|------|--------|------|--------|------|--------|------|--------|------|--------|------|--------|------|--------|------|--------|------|--------|------|
| 12.14 | 3.40 | 12.26 | 3.60 | 12.43 | 3.70 | 12.41 | 3.60 | 12.36 | 3.90 | 12.07 | 3.40 | 12.36 | 3.60 | 12.48 | 3.50 | 12.32 | 3.90 | 12.07 | 3.40 | 12.36 | 3.60 | 12.48 | 3.50 |
| 12.02 | 3.20 | 12.22 | 3.60 | 12.26 | 3.30 | 12.00 | 3.40 | 12.48 | 3.50 | 12.32 | 3.90 | 12.48 | 3.50 | 12.28 | 3.60 | 12.22 | 3.90 | 12.32 | 3.90 | 12.48 | 3.50 | 12.28 | 3.60 |
| 12.27 | 3.20 | 12.00 | 3.40 | 12.31 | 3.65 | 12.38 | 3.40 | 12.28 | 3.60 | 12.22 | 3.90 | 12.28 | 3.60 | 12.17 | 3.70 | 12.13 | 3.40 | 12.13 | 3.40 | 12.22 | 3.90 | 12.17 | 3.70 |
| 12.45 | 3.85 | 12.47 | 3.80 | 12.13 | 3.46 | 12.19 | 3.30 | 12.16 | 3.70 | 12.01 | 3.30 | 12.16 | 3.70 | 12.24 | 3.45 | 12.28 | 3.80 | 12.01 | 3.30 | 12.16 | 3.70 | 12.24 | 3.45 |
| 12.41 | 3.60 | 12.38 | 3.80 | 12.07 | 3.00 | 12.45 | 3.70 | 12.36 | 3.90 | 12.28 | 3.80 | 12.36 | 3.90 | 12.24 | 3.45 | 12.28 | 3.80 | 12.28 | 3.80 | 12.36 | 3.90 | 12.24 | 3.45 |
| 12.00 | 2.65 | 12.48 | 4.00 | 12.98 | 3.20 | 12.26 | 3.20 | 12.33 | 3.40 | 12.13 | 3.50 | 12.33 | 3.40 | 12.24 | 3.45 | 12.28 | 3.80 | 12.28 | 3.80 | 12.36 | 3.90 | 12.24 | 3.45 |
| 12.24 | 3.60 | 12.31 | 3.90 | 12.03 | 3.50 | 12.06 | 3.20 | 12.33 | 3.40 | 12.13 | 3.50 | 12.33 | 3.40 | 12.24 | 3.45 | 12.28 | 3.80 | 12.28 | 3.80 | 12.36 | 3.90 | 12.24 | 3.45 |
| 12.24 | 3.40 | 12.29 | 3.60 | 12.26 | 3.70 | 12.46 | 3.60 | 12.34 | 3.50 | 12.02 | 3.50 | 12.34 | 3.50 | 12.24 | 3.45 | 12.28 | 3.80 | 12.02 | 3.50 | 12.34 | 3.50 | 12.24 | 3.45 |
| 12.36 | 3.70 | 12.06 | 3.40 | 12.30 | 3.50 | 12.14 | 3.00 | 12.11 | 3.70 | 12.45 | 3.50 | 12.11 | 3.00 | 12.24 | 3.45 | 12.28 | 3.80 | 12.45 | 3.50 | 12.11 | 3.70 | 12.24 | 3.45 |
| 12.34 | 3.30 | 12.36 | 3.60 | 12.30 | 3.50 | 12.08 | 3.10 | 12.00 | 3.50 | 12.32 | 3.40 | 12.00 | 3.50 | 12.24 | 3.45 | 12.28 | 3.80 | 12.32 | 3.40 | 12.00 | 3.50 | 12.24 | 3.45 |
| 12.00 | 3.40 | 12.01 | 3.40 | 12.26 | 3.70 | 12.45 | 3.80 | 12.19 | --- | 12.16 | 3.40 | 12.19 | --- | 12.24 | 3.45 | 12.28 | 3.80 | 12.32 | 3.40 | 12.00 | 3.50 | 12.24 | 3.45 |
| 12.98 | 3.60 | 12.10 | 3.50 | 12.46 | 3.60 | 12.24 | 3.60 | 12.33 | 4.00 | 12.38 | 3.55 | 12.33 | 3.60 | 12.24 | 3.45 | 12.28 | 3.80 | 12.38 | 4.00 | 12.38 | 3.55 | 12.24 | 3.45 |
| 12.26 | 3.50 | 12.06 | 3.30 | 12.01 | 3.30 | 12.42 | 3.60 | 12.47 | 3.90 | 12.10 | 3.35 | 12.42 | 3.60 | 12.38 | 3.80 | 12.10 | 3.35 | 12.47 | 3.90 | 12.10 | 3.35 | 12.38 | 3.80 |
| 12.03 | 3.40 | 12.13 | 3.60 | 12.26 | 3.50 | 12.44 | 3.60 | 12.38 | 3.80 | 12.05 | 3.60 | 12.44 | 3.60 | 12.38 | 3.80 | 12.05 | 3.60 | 12.47 | 3.90 | 12.10 | 3.35 | 12.38 | 3.80 |
| 12.05 | 3.55 | 12.03 | 3.30 | 12.18 | 3.35 | 12.32 | 3.30 | 12.04 | 3.50 | 12.15 | 3.90 | 12.32 | 3.30 | 12.04 | 3.50 | 12.15 | 3.90 | 12.04 | 3.50 | 12.15 | 3.90 | 12.32 | 3.30 |
| 12.38 | 3.65 | 12.11 | 3.30 | 12.45 | 3.50 | 12.12 | 3.40 | 12.44 | 3.70 | 12.48 | 4.00 | 12.12 | 3.40 | 12.44 | 3.70 | 12.48 | 4.00 | 12.44 | 3.70 | 12.48 | 4.00 | 12.12 | 3.40 |
| 12.31 | 2.40 | 12.22 | 3.85 | 12.13 | 3.50 | 12.34 | 3.30 | 12.20 | 3.40 | 12.20 | 3.20 | 12.34 | 3.30 | 12.20 | 3.40 | 12.20 | 3.20 | 12.20 | 3.40 | 12.20 | 3.20 | 12.34 | 3.30 |
| 12.06 | 3.40 | 12.00 | 3.10 | 12.12 | 3.20 | 12.20 | 3.50 | 12.38 | 4.00 | 12.08 | 3.75 | 12.20 | 3.50 | 12.38 | 4.00 | 12.08 | 3.75 | 12.20 | 3.50 | 12.38 | 4.00 | 12.08 | 3.75 |
| 12.26 | 3.50 | 12.00 | 3.20 | 12.20 | 3.40 | 12.29 | 3.40 | 12.26 | 3.80 | 12.21 | 3.00 | 12.29 | 3.40 | 12.26 | 3.80 | 12.21 | 3.00 | 12.26 | 3.80 | 12.21 | 3.00 | 12.26 | 3.80 |
| 12.32 | 3.70 | 12.15 | 3.60 | 12.12 | 3.30 | 12.09 | 3.30 | 12.25 | 3.40 | 12.00 | 3.45 | 12.09 | 3.30 | 12.25 | 3.40 | 12.00 | 3.45 | 12.25 | 3.40 | 12.00 | 3.45 | 12.25 | 3.40 |

CLASSIFIED TABLE OF MILK ANALYSES—Continued.

113 Samples having a percentage of Total Solids below 12.00.
Average for Solids, 11.50. Average for Fat, 3.06.

| Solids | Fat | Solids | Fat | Solids | Fat | Solids | Fat | Solids | Fat | Solids | Fat | Solids | Fat |
|--------|------|--------|------|--------|------|--------|------|--------|------|--------|------|--------|------|
| 11.82 | 2.80 | 11.59 | 3.05 | 11.94 | 3.80 | 11.15 | 3.30 | 10.59 | 2.20 | 11.60 | 2.90 | 11.60 | 2.90 |
| 10.60 | 2.90 | 11.56 | 3.10 | 11.60 | 2.90 | 11.83 | 3.70 | 11.92 | 3.80 | 11.39 | 2.80 | 11.39 | 2.80 |
| 10.66 | 3.00 | 11.96 | 3.40 | 11.97 | 3.40 | 11.84 | 3.40 | 11.73 | 3.80 | 11.23 | 2.60 | 11.23 | 2.60 |
| 11.69 | 2.70 | 10.87 | 2.80 | 11.62 | 3.20 | 11.83 | 3.10 | 11.39 | 3.00 | 11.36 | 3.00 | 11.36 | 3.00 |
| 11.18 | 2.50 | 11.94 | 3.40 | 11.26 | 2.40 | 11.95 | 3.15 | 11.69 | 3.00 | 11.36 | 3.00 | 11.36 | 3.00 |
| 11.04 | 2.30 | 11.77 | 3.95 | 11.62 | 3.20 | 11.74 | 3.20 | 11.21 | 2.70 | 11.74 | 3.10 | 11.74 | 3.10 |
| 10.63 | 2.20 | 10.82 | 2.50 | 11.62 | 3.20 | 11.96 | 3.30 | 10.48 | 2.65 | 11.66 | 2.80 | 11.66 | 2.80 |
| 11.17 | 2.50 | 11.74 | 3.15 | 11.68 | 3.10 | 11.28 | 3.40 | 11.80 | 3.50 | 10.90 | 2.50 | 10.90 | 2.50 |
| 11.74 | 3.40 | 11.35 | 2.70 | 11.96 | 3.00 | 11.53 | 3.20 | 9.81 | 1.80 | 11.64 | 2.85 | 11.64 | 2.85 |
| 11.84 | 3.10 | 11.18 | 2.80 | 11.46 | 3.05 | 11.88 | 3.40 | 11.39 | 3.10 | 11.93 | 4.20 | 11.93 | 4.20 |
| 11.94 | 3.05 | 11.92 | 3.20 | 11.64 | 3.15 | 11.85 | 3.60 | 11.65 | 3.00 | 11.94 | 3.20 | 11.94 | 3.20 |
| 11.51 | 2.80 | 11.90 | 3.00 | 11.74 | 3.05 | 11.03 | 3.20 | 11.08 | 2.30 | 11.14 | 2.80 | 11.14 | 2.80 |
| 11.81 | 3.30 | 11.78 | 3.70 | 11.91 | 3.40 | 11.10 | 3.40 | 11.58 | 3.20 | 10.21 | 2.15 | 10.21 | 2.15 |
| 11.92 | 3.20 | 11.79 | 3.50 | 11.87 | 2.70 | 11.39 | 2.60 | 11.47 | 3.20 | 11.92 | 3.50 | 11.92 | 3.50 |
| 11.60 | 3.00 | 11.54 | 3.30 | 11.29 | 2.30 | 11.56 | 3.00 | 11.55 | 3.60 | 11.72 | 2.50 | 11.72 | 2.50 |
| 11.69 | 3.00 | 11.49 | 3.25 | 10.95 | 2.15 | 11.53 | 3.70 | 11.58 | 3.00 | 11.90 | 3.20 | 11.90 | 3.20 |
| 10.93 | 2.80 | 11.95 | 3.35 | 11.35 | 2.50 | 11.00 | 3.00 | 11.56 | 3.00 | 11.30 | 2.60 | 11.30 | 2.60 |
| 10.98 | 3.10 | 11.30 | 3.40 | 11.88 | 3.10 | 11.35 | 3.60 | 11.97 | 3.05 | 11.41 | 3.00 | 11.41 | 3.00 |
| 11.66 | 3.40 | 11.35 | 3.20 | 11.54 | 3.00 | 11.96 | 3.35 | 11.41 | 2.80 | | | | |

COMPARISON TABLE.

| Year | 1897 | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 |
|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Number of samples analyzed | 136 | 178 | 221 | 283 | 293 | 330 | 465 | 352 | 445 | 442 | 418 | 531 | 365 |
| Percentage of samples | | | | | | | | | | | | | |
| 1st class | 69.12 | 70.23 | 72.40 | 65.37 | 63.82 | 58.18 | 62.80 | 54.55 | 49.90 | 51.81 | 52.63 | 46.52 | 36.16 |
| Average % of total solids | 13.24 | 13.24 | 13.06 | 13.24 | 13.10 | 13.18 | 12.97 | 13.07 | 13.14 | 13.14 | 13.21 | 13.09 | 13.24 |
| Average % of fat | --- | --- | 3.95 | 4.06 | 4.01 | 4.16 | 3.88 | 4.05 | 4.10 | 4.06 | 4.22 | 4.08 | 4.13 |
| Percentage of samples | | | | | | | | | | | | | |
| 2d class | 21.32 | 14.15 | 15.38 | 21.55 | 22.87 | 27.88 | 21.29 | 27.56 | 29.66 | 25.34 | 29.67 | 29.00 | 32.88 |
| Average % of total solids | 12.23 | 12.35 | 12.27 | 12.25 | 12.25 | 12.25 | 12.25 | 12.26 | 12.22 | 12.24 | 12.25 | 12.22 | 12.24 |
| Average % of fat | --- | --- | 3.60 | 3.56 | 3.52 | 3.55 | 3.50 | 3.60 | 3.49 | 3.45 | 3.56 | 3.46 | 3.53 |
| Percentage of samples | | | | | | | | | | | | | |
| 3d class | 19.56 | 15.73 | 12.22 | 13.07 | 13.31 | 13.94 | 15.91 | 17.89 | 20.44 | 22.85 | 17.70 | 24.48 | 30.96 |
| Average % of total solids | 11.61 | 11.58 | 11.48 | 11.56 | 11.82 | 11.44 | 11.51 | 11.25 | 11.38 | 11.47 | 11.57 | 11.50 | 11.50 |
| Average % of fat | --- | --- | 3.11 | 3.25 | 3.08 | 3.13 | 3.18 | 3.10 | 3.04 | 3.20 | 3.14 | 3.06 | 3.06 |
| General average % of total solids | 12.87 | 12.82 | 12.75 | 12.77 | 12.70 | 12.64 | 12.60 | 12.52 | 12.51 | 12.53 | 12.63 | 12.45 | 12.37 |
| General average % of fat | --- | --- | 3.80 | 3.85 | 3.75 | 3.81 | 3.68 | 3.75 | 3.61 | 3.71 | 3.83 | 3.65 | 3.62 |

CITY WATER.

There is little to be said about the quality of the City water as compared with last year except as it was affected by the dry season and low level of water in the reservoirs. This resulted in making the yearly averages somewhat higher for Color, Hardness, total Solids, etc., although not enough so to make a noticeable difference to the consumer, especially as the turbidity was no higher.

The water as delivered to and from the city mains is of first-class quality and there are few unfiltered surface supplies as good.

ANALYSIS OF NEWARK AQUEDUCT WATER.

Sample from Oak Ridge Stream before junction with Clinton Stream at New Foundland.

PARTS PER MILLION.

| 1909 | Temperature, Fah. | Turbidity | Color | Nitrogen as | | | | Chlorine | Temporary Hardness (Alkalinity) | Total Solids | Loss on Ignition | Fixed Solids |
|----------|-------------------|-----------|-------|--------------|--------------------|----------|----------|----------|---------------------------------|--------------|------------------|--------------|
| | | | | Free Ammonia | Albumenoid Ammonia | Nitrites | Nitrates | | | | | |
| Jan. 19 | -- | 2 | 27 | .026 | .118 | .003 | .09 | 2.5 | 28 | 72 | 34 | 38 |
| Feb. 17 | 34 | 9 | 27 | .022 | .060 | * | .08 | 2.5 | 17 | 43 | 18 | 25 |
| Mar. 23 | 33 | 3 | 20 | .026 | .104 | * | .10 | 2.5 | 21 | 52 | 19 | 33 |
| April 21 | 47 | 5 | 30 | .008 | .080 | * | .10 | 2.0 | 18 | 45 | 17 | 28 |
| May 19 | 56 | 2 | 20 | .025 | .070 | † | .05 | 2.0 | 22 | 48 | 24 | 24 |
| June 16 | 54 | 3 | 24 | .006 | .052 | * | .08 | 2.0 | 23 | 47 | 22 | 25 |
| July 21 | 62 | 3 | 27 | .010 | .104 | † | .08 | 2.5 | 26 | 53 | 21 | 32 |
| Aug. 19 | 59 | 3 | 20 | † | .035 | † | -- | 2.5 | 33 | 58 | 22 | 36 |
| Sept. 16 | -- | 1 | -- | * | .026 | * | -- | 3.0 | 37 | 69 | 19 | 50 |
| Oct. 14 | 43 | 1 | 10 | * | .035 | * | .10 | 3.0 | 35 | 63 | 18 | 43 |
| Nov. 17 | 49 | 2 | 27 | .016 | .104 | .002 | † | 2.5 | 25 | 62 | 24 | 38 |
| Dec. 21 | 34 | 5 | 28 | .026 | .104 | * | .05 | 3.0 | 25 | 57 | 17 | 40 |

* None. † Trace.

ANALYSIS OF NEWARK AQUEDUCT WATER.

Sample from Clinton Stream before junction with Oak Ridge Stream at New Foundland.

PARTS PER MILLION.

| 1909 | Temperature, Fah. | Turbidity | Color | Nitrogen as | | | | Chlorine | Temporary Hardness (Alkalinity) | Total Solids | Loss on Ignition | Fixed Solids |
|----------|-------------------|-----------|-------|--------------|--------------------|----------|----------|----------|------------------------------------|--------------|------------------|--------------|
| | | | | Free Ammonia | Albumenoid Ammonia | Nitrites | Nitrates | | | | | |
| Jan. 19 | -- | 2 | 12 | .010 | .052 | .003 | .05 | 2.0 | 12 | 40 | 12 | 28 |
| Feb. 17 | 32 | 3 | 25 | .016 | .060 | * | .08 | 2.5 | 7 | 35 | 11 | 24 |
| Mar. 23 | 32 | 1 | 10 | .010 | .046 | † | .05 | 2.0 | 15 | 40 | 16 | 24 |
| April 21 | 46 | 4 | 25 | .006 | .070 | * | * | 2.0 | 8 | 24 | 14 | 10 |
| May 19 | 55 | 1 | 18 | .006 | .050 | * | † | 1.5 | 10 | 31 | 16 | 15 |
| June 16 | 56 | 1 | 15 | * | .054 | * | .05 | 2.0 | 12 | 32 | 16 | 16 |
| July 21 | 57 | 1 | 14 | * | .034 | * | .04 | 2.5 | 19 | 37 | 16 | 21 |
| Aug. 19 | 57 | 1 | 15 | * | .020 | * | † | 2.5 | 18 | 35 | 15 | 20 |
| Sept. 16 | -- | 3 | 20 | * | .050 | † | .05 | 1.5 | 9 | 28 | 15 | 13 |
| Oct. 14 | 52 | 2 | 18 | * | .064 | * | † | 2.5 | 9 | 36 | 10 | 26 |
| Nov. 17 | 50 | 0.5 | 10 | .006 | .034 | .003 | .10 | 2.5 | 24 | 42 | 15 | 27 |
| Dec. 21 | 37 | 3 | 10 | .008 | .034 | † | .10 | 2.5 | 28 | 67 | 22 | 45 |

* None. † Trace.

CITY WATER.

There is little to be said about the quality of the City water as compared with last year except as it was affected by the dry season and low level of water in the reservoirs. This resulted in making the yearly averages somewhat higher for Color, Hardness, total Solids, etc., although not enough so to make a noticeable difference to the consumer, especially as the turbidity was no higher.

The water as delivered to and from the city mains is of first-class quality and there are few unfiltered surface supplies as good.

ANALYSIS OF NEWARK AQUEDUCT WATER.

Sample from Oak Ridge Stream before junction with Clinton Stream at New Foundland.

PARTS PER MILLION.

| 1909 | Temperature, Fah. | Turbidity | Color | Nitrogen as | | | | Chlorine | Temporary Hardness (Alkalinity) | Total Solids | Loss on Ignition | Fixed Solids |
|----------|-------------------|-----------|-------|--------------|--------------------|----------|----------|----------|---------------------------------|--------------|------------------|--------------|
| | | | | Free Ammonia | Albumenoid Ammonia | Nitrites | Nitrates | | | | | |
| Jan. 19 | -- | 2 | 27 | .026 | .118 | .003 | .09 | 2.5 | 28 | 72 | 34 | 38 |
| Feb. 17 | 34 | 9 | 27 | .022 | .060 | * | .08 | 2.5 | 17 | 43 | 18 | 25 |
| Mar. 23 | 33 | 3 | 20 | .026 | .104 | * | .10 | 2.5 | 21 | 52 | 19 | 33 |
| April 21 | 47 | 5 | 30 | .008 | .080 | * | .10 | 2.0 | 18 | 45 | 17 | 28 |
| May 19 | 56 | 2 | 20 | .025 | .070 | † | .05 | 2.0 | 22 | 48 | 24 | 24 |
| June 16 | 54 | 3 | 24 | .006 | .052 | * | .08 | 2.0 | 23 | 47 | 22 | 25 |
| July 21 | 62 | 3 | 27 | .010 | .104 | † | .08 | 2.5 | 26 | 53 | 21 | 32 |
| Aug. 19 | 59 | 3 | 20 | † | .035 | † | -- | 2.5 | 33 | 58 | 22 | 36 |
| Sept. 16 | -- | 1 | -- | * | .026 | * | -- | 3.0 | 37 | 69 | 19 | 50 |
| Oct. 14 | 43 | 1 | 10 | * | .035 | * | .10 | 3.0 | 35 | 63 | 18 | 43 |
| Nov. 17 | 49 | 2 | 27 | .016 | .104 | .002 | † | 2.5 | 25 | 62 | 24 | 38 |
| Dec. 21 | 34 | 5 | 28 | .026 | .104 | * | .05 | 3.0 | 25 | 57 | 17 | 40 |

* None. † Trace.

ANALYSIS OF NEWARK AQUEDUCT WATER.

Sample from Clinton Stream before junction with Oak Ridge
Stream at New Foundland.

PARTS PER MILLION.

| 1909 | Temperature, Fah. | Turbidity | | Color | Nitrogen as | | | | Chlorine | Temporary Hardness (Alkalinity) | Total Solids | Loss on Ignition | Fixed Solids |
|----------|-------------------|-----------|----|-------|--------------|--------------------|----------|----------|----------|------------------------------------|--------------|------------------|--------------|
| | | | | | Free Ammonia | Albumenoid Ammonia | Nitrites | Nitrates | | | | | |
| Jan. 19 | -- | 2 | 12 | | .010 | .052 | .003 | .05 | 2.0 | 12 | 40 | 12 | 28 |
| Feb. 17 | 32 | 3 | 25 | | .016 | .060 | * | .08 | 2.5 | 7 | 35 | 11 | 24 |
| Mar. 23 | 32 | 1 | 10 | | .010 | .046 | † | .05 | 2.0 | 15 | 40 | 16 | 24 |
| April 21 | 46 | 4 | 25 | | .006 | .070 | * | * | 2.0 | 8 | 24 | 14 | 10 |
| May 19 | 55 | 1 | 18 | | .006 | .050 | * | † | 1.5 | 10 | 31 | 16 | 15 |
| June 16 | 56 | 1 | 15 | | * | .054 | * | .05 | 2.0 | 12 | 32 | 16 | 16 |
| July 21 | 57 | 1 | 14 | | * | .034 | * | .04 | 2.5 | 19 | 37 | 16 | 21 |
| Aug. 19 | 57 | 1 | 15 | | * | .020 | * | † | 2.5 | 18 | 35 | 15 | 20 |
| Sept. 16 | -- | 3 | 20 | | * | .050 | † | .05 | 1.5 | 9 | 28 | 15 | 13 |
| Oct. 14 | 52 | 2 | 18 | | * | .064 | * | † | 2.5 | 9 | 36 | 10 | 26 |
| Nov. 17 | 50 | 0.5 | 10 | | .006 | .034 | .003 | .10 | 2.5 | 24 | 42 | 15 | 27 |
| Dec. 21 | 37 | 3 | 10 | | .008 | .034 | † | .10 | 2.5 | 28 | 67 | 22 | 45 |

* None. † Trace.

ANALYSIS OF NEWARK AQUEDUCT WATER.
 Sample from Kanouse Brook above Pequannock River.
 PARTS PER MILLION.

| 1909 | Temperature, Fah. | Turbidity | Color | Nitrogen as | | | | Chlorine | Temporary Hardness (Alkalinity) | Total Solids | Loss on Ignition | Fixed Solids |
|----------|-------------------|-----------|-------|--------------|--------------------|----------|----------|----------|------------------------------------|--------------|------------------|--------------|
| | | | | Free Ammonia | Albumenoid Ammonia | Nitrites | Nitrates | | | | | |
| Jan. 19 | -- | 2 | 10 | .008 | .060 | .003 | .04 | 2.0 | 13 | 58 | 22 | 36 |
| Feb. 17 | 31 | 6 | 40 | .014 | .084 | * | .08 | 2.5 | 7 | 36 | 12 | 24 |
| Mar. 23 | 32 | 2 | 25 | .012 | .070 | * | .08 | 2.0 | 15 | 41 | 17 | 24 |
| April 21 | 45 | 2 | 45 | .005 | .070 | * | .15 | 2.0 | 9 | 34 | 15 | 18 |
| May 19 | 54 | 2 | 50 | .008 | .104 | * | † | 1.5 | 18 | 40 | 21 | 19 |
| June 16 | 57 | 3 | 45 | .006 | .084 | * | .05 | 2.0 | 20 | 44 | 21 | 23 |
| July 21 | 57 | 4 | 25 | .004 | .054 | * | .08 | 2.5 | 24 | 45 | 16 | 29 |
| Aug. 19 | 60 | 2 | 50 | † | .106 | * | † | 1.2 | 10 | 60 | 22 | 38 |
| Sept. 16 | -- | 2 | 15 | * | .050 | * | .05 | 2.0 | 27 | 46 | 18 | 28 |
| Oct. 14 | 41 | 4 | 35 | * | .056 | * | † | 3.0 | 26 | 56 | 14 | 42 |
| Nov. 17 | 50 | 2 | 25 | .006 | .052 | * | .05 | 3.0 | 27 | 55 | 22 | 33 |
| Dec. 21 | 35 | 3 | 30 | .020 | .070 | * | .05 | 3.0 | 15 | 67 | 22 | 45 |

* None. † Trace.

ANALYSIS OF NEWARK AQUEDUCT WATER.
 Samples from Echo Lake Stream above Pequannock River.
 PARTS PER MILLION.

| 1909 | Temperature, Fah. | Turbidity | Color | Nitrogen as | | | | Chlorine | Temporary Hardness (Alkalinity) | Total Solids | Loss on Ignition | Fixed Solids |
|----------|-------------------|-----------|-------|--------------|--------------------|----------|----------|----------|------------------------------------|--------------|------------------|--------------|
| | | | | Free Ammonia | Albumenoid Ammonia | Nitrites | Nitrates | | | | | |
| Jan. 19 | 31 | 1 | 30 | .004 | .030 | .003 | .05 | 3.5 | 13 | 46 | 10 | 36 |
| Feb. 17 | 32 | 4 | 40 | .026 | .154 | * | .08 | 2.0 | 13 | 54 | 19 | 35 |
| Mar. 23 | 31 | 1 | 25 | .018 | .080 | * | .08 | 2.0 | 17 | 45 | 18 | 27 |
| April 21 | 46 | 2 | 40 | .005 | .140 | * | .20 | 2.0 | 14 | 48 | 26 | 22 |
| May 19 | 56 | 2 | 40 | .008 | .090 | * | .05 | 1.5 | 18 | 51 | 26 | 25 |
| June 16 | 58 | 2 | 28 | .006 | .082 | * | -- | 2.0 | 22 | 51 | 20 | 31 |
| July 21 | 56 | 1 | 20 | .004 | .048 | * | .15 | 3.0 | 20 | 43 | 18 | 25 |
| Aug. 19 | 63 | 2 | 45 | † | .140 | * | .10 | 1.5 | 17 | 55 | 20 | 35 |
| Sept. 16 | -- | 1 | 15 | * | .050 | † | .05 | 3.0 | 22 | 44 | 20 | 24 |
| Oct. 14 | 43 | 1 | 25 | .005 | .074 | * | † | 3.5 | 26 | 55 | 15 | 40 |
| Nov. 17 | 48 | 0.5 | 25 | * | .054 | * | * | 3.0 | 27 | 63 | 23 | 40 |
| Dec. 21 | 37 | 3 | 30 | .010 | .110 | * | .08 | 3.0 | 22 | 59 | 27 | 32 |

* None. † Trace.

ANALYSIS OF NEWARK AQUEDUCT WATER.
 Samples from Macopin Intake at Gatehouse.
 PARTS PER MILLION.

| 1909 | Temperature, Fah. | Turbidity | Color | Nitrogen as | | | | Chlorine | Temporary Hardness (Alkalinity) | Total Solids | Loss on Ignition | Fixed Solids |
|----------|-------------------|-----------|-------|--------------|--------------------|----------|----------|----------|------------------------------------|--------------|------------------|--------------|
| | | | | Free Ammonia | Albumenoid Ammonia | Nitrites | Nitrates | | | | | |
| Jan. 19 | 33 | 2 | 27 | .020 | .070 | .003 | .06 | 2.5 | 23 | 67 | 29 | 38 |
| Feb. 17 | 33 | 7 | 40 | .010 | .065 | * | .08 | 2.5 | 11 | 40 | 13 | 27 |
| Mar. 23 | 32 | 1 | 22 | .014 | .060 | * | .25 | 2.0 | 19 | 45 | 21 | 24 |
| April 21 | 46 | 2 | 35 | .006 | .070 | * | .10 | 2.0 | 14 | 40 | 20 | 20 |
| May 19 | 58 | 1 | 25 | .004 | .054 | * | .05 | 1.5 | 18 | 43 | 17 | 26 |
| June 16 | 59 | 2 | 25 | .012 | .066 | * | .05 | 2.0 | 21 | 56 | 30 | 26 |
| July 21 | 64 | 3 | 25 | .012 | .070 | .007 | .08 | 2.5 | 26 | 50 | 21 | 29 |
| Aug. 19 | 62 | 3 | 55 | † | .140 | * | .10 | 1.5 | 17 | 56 | 25 | 31 |
| Sept. 16 | -- | 3 | 18 | * | .050 | * | .17 | 2.5 | 12 | 41 | 19 | 22 |
| Oct. 14 | 44 | 3 | 23 | .008 | .066 | * | † | 2.5 | 13 | 37 | 17 | 20 |
| Nov. 17 | 46 | 2 | 27 | .014 | .080 | † | † | 2.5 | 27 | 55 | 22 | 33 |
| Dec. 21 | 35 | 2 | 25 | .010 | .084 | * | .06 | 3.0 | 16 | 58 | 23 | 35 |

* None. † Trace.

ANALYSIS OF NEWARK AQUEDUCT WATER.

Samples from Cedar Grove Reservoir at Inlet Gatehouse.

PARTS PER MILLION.

| 1909 | Temperature, Fah. | Turbidity | Color | Nitrogen as | | | | Chlorine | Temporary Hardness (Alkalinity) | Total Solids | Loss on Ignition | Fixed Solids |
|----------|-------------------|-----------|-------|-----------------|-----------------------|----------|----------|----------|------------------------------------|--------------|------------------|--------------|
| | | | | Free Ammonia | Albumenoid Ammonia | Nitrites | Nitrates | | | | | |
| | | | | | | | | | | | | |
| Jan. 19 | 32 | 3 | 27 | .020 | .082 | .003 | .09 | 2.5 | 24 | 63 | 26 | 37 |
| Feb. 17 | 36 | 4 | 40 | .012 | .084 | * | .05 | 2.5 | 11 | 52 | 23 | 29 |
| Mar. 23 | 34 | 1 | 16 | .015 | .060 | * | .10 | 2.0 | 19 | 45 | 20 | 25 |
| April 21 | 48 | 2 | 35 | .010 | .070 | * | .10 | 2.0 | 14 | 38 | 19 | 19 |
| May 19 | 60 | 1 | 25 | .006 | .064 | * | .05 | 1.5 | 18 | 46 | 18 | 28 |
| June 16 | 68 | 1 | 25 | .006 | .064 | * | .06 | 2.0 | 20 | 50 | 21 | 29 |
| July 21 | 67 | 2 | 24 | † | .070 | † | .14 | 2.5 | 26 | 51 | 22 | 29 |
| Aug. 19 | 63 | 2 | 50 | † | .150 | * | .10 | 2.0 | 16 | 61 | 25 | 36 |
| Sept. 16 | -- | 3 | 20 | † | .050 | * | .05 | 2.5 | 11 | 41 | 20 | 21 |
| Oct. 14 | 49 | 2 | 20 | .008 | .064 | * | † | 2.5 | 13 | 39 | 18 | 21 |
| Nov. 17 | 47 | 1 | 25 | .016 | .070 | † | .05 | 2.5 | 27 | 55 | 22 | 33 |
| Dec. 21 | 38 | 3 | 28 | .010 | .086 | * | .05 | 3.0 | 20 | 53 | 22 | 31 |

* None. † Trace.

ANALYSIS OF NEWARK AQUEDUCT WATER.
 Samples from Cedar Grove Reservoir at Outlet Gatehouse.
 PARTS PER MILLION.

| 1909 | Temperature, Fah. | Turbidity | Color | Nitrogen as | | | | Chlorine | Temporary Hardness (Alkalinity) | Total Solids | Loss on Ignition | Fixed Solids |
|----------|-------------------|-----------|-------|--------------|--------------------|----------|----------|----------|------------------------------------|--------------|------------------|--------------|
| | | | | Free Ammonia | Albumenoid Ammonia | Nitrites | Nitrates | | | | | |
| Jan. 19 | 33 | 4 | 27 | .040 | .064 | .003 | .06 | 2.5 | 22 | 62 | 21 | 41 |
| Feb. 17 | 34 | 1 | 25 | .016 | .060 | * | .05 | 2.5 | 19 | 44 | 14 | 30 |
| Mar. 23 | 36 | 1 | 16 | .016 | .064 | * | .08 | 2.0 | 17 | 42 | 15 | 27 |
| April 21 | 50 | 3 | 22 | .020 | .050 | * | .10 | 2.0 | 14 | 43 | 22 | 21 |
| May 19 | 63 | 1 | 25 | .008 | .060 | † | .05 | 2.0 | 18 | 45 | 16 | 29 |
| June 16 | 66 | 1 | 25 | .010 | .064 | * | .05 | 2.0 | 20 | 50 | 21 | 29 |
| July 21 | 72 | 2 | 21 | .012 | .105 | .005 | .06 | 2.0 | 25 | 50 | 23 | 27 |
| Aug. 19 | 64 | 1 | 20 | .001 | .064 | † | .08 | 2.0 | 22 | 51 | 23 | 28 |
| Sept. 16 | -- | 2 | 18 | * | .066 | * | .07 | 2.5 | 18 | 49 | 17 | 22 |
| Oct. 14 | 59 | 2 | 20 | .010 | .056 | * | † | 2.5 | 13 | 37 | 15 | 22 |
| Nov. 17 | 49 | 1.5 | 25 | .012 | .070 | .001 | .05 | 2.5 | 27 | 50 | 23 | 27 |
| Dec. 21 | 37 | 3 | 28 | .009 | .104 | * | .05 | 2.5 | 20 | 58 | 23 | 35 |

* None. † Trace.

ANALYSIS OF NEWARK AQUEDUCT WATER.

Samples from Belleville Reservoir at Inlet Gatehouse.

PARTS PER MILLION.

| 1909 | Temperature, Fah. | Turbidity | Color | Nitrogen as | | | | Chlorine | Temporary Hardness (Alkalinity) | Total Solids | Loss on Ignition | Fixed Solids |
|----------|-------------------|-----------|-------|--------------|--------------------|----------|----------|----------|------------------------------------|--------------|------------------|--------------|
| | | | | Free Ammonia | Albumenoid Ammonia | Nitrites | Nitrates | | | | | |
| Jan. 19 | 35 | 3 | 27 | .030 | .064 | .003 | .06 | 2.5 | 22 | 63 | 21 | 41 |
| Feb. 17 | 36 | 1 | 25 | .016 | .062 | † | .12 | 2.5 | 18 | 50 | 17 | 23 |
| Mar. 23 | 37 | 1 | 22 | .015 | .070 | † | .08 | 2.0 | 17 | 44 | 15 | 29 |
| April 21 | 50 | 3 | 20 | .015 | .064 | † | .10 | 2.0 | 14 | 44 | 15 | 29 |
| May 19 | 59 | 1 | 25 | .005 | .054 | * | .05 | 2.0 | 16 | 43 | 18 | 25 |
| June 16 | 66 | 1 | 25 | .006 | .068 | * | .08 | 2.0 | 20 | 48 | 18 | 30 |
| July 21 | 71 | 2 | 21 | † | .084 | † | .08 | 2.0 | 24 | 52 | 22 | 30 |
| Aug. 19 | 69 | 1 | 22 | † | .070 | † | .10 | 2.0 | 22 | 53 | 25 | 28 |
| Sept. 16 | -- | 2 | 20 | † | .066 | * | .07 | 2.5 | 19 | 41 | 18 | 23 |
| Oct. 14 | 60 | 2 | 20 | .006 | .060 | * | † | 2.5 | 13 | 37 | 15 | 22 |
| Nov. 17 | 49 | 2 | 22 | .012 | .070 | .003 | .05 | 2.5 | 21 | 49 | 23 | 26 |
| Dec. 21 | 38 | 3 | 28 | .012 | .074 | * | .04 | 2.5 | 20 | 59 | 22 | 37 |

* None. † Trace.

ANALYSIS OF NEWARK AQUEDUCT WATER.

Samples from Laboratory Faucet, 927 Broad Street.

PARTS PER MILLION.


| 1909 | Temperature, Fah. | Turbidity | Color | Nitrogen as | | | | Chlorine | Temporary Hardness (Alkalinity) | Total Solids | Loss on Ignition | Fixed Solids |
|----------|-------------------|-----------|-------|--------------|--------------------|----------|----------|----------|------------------------------------|--------------|------------------|--------------|
| | | | | Free Ammonia | Albumenoid Ammonia | Nitrites | Nitrates | | | | | |
| Jan. 19 | 35 | 3 | 27 | .030 | .070 | .003 | .06 | 2.5 | 22 | 63 | 23 | 40 |
| Feb. 17 | 37 | 1 | 27 | .015 | .070 | * | .08 | 2.5 | 19 | 48 | 15 | 33 |
| Mar. 23 | 39 | 1 | 22 | .016 | .090 | * | .08 | 2.0 | 17 | 46 | 15 | 31 |
| April 21 | 51 | 2 | 20 | .008 | .054 | * | .10 | 2.0 | 14 | 40 | 20 | 20 |
| May 19 | 59 | 1 | 22 | .005 | .058 | * | .05 | 2.0 | 16 | 47 | 20 | 29 |
| June 16 | 64 | 1 | 25 | .006 | .064 | * | .10 | 2.0 | 20 | 48 | 21 | 27 |
| July 21 | 72 | 2 | 20 | † | .084 | * | .08 | 2.0 | 23 | 50 | 20 | 30 |
| Aug. 19 | 69 | 1 | 20 | † | .050 | * | .06 | 2.0 | 22 | 50 | 20 | 30 |
| Sept. 16 | -- | 1 | 18 | .002 | .066 | * | .07 | 2.5 | 19 | 41 | 18 | 23 |
| Oct. 14 | 61 | 2 | 20 | .006 | .054 | * | † | 2.5 | 13 | 36 | 14 | 22 |
| Nov. 17 | 50 | 1 | 20 | .016 | .072 | .001 | .05 | 2.5 | 21 | 53 | 25 | 28 |
| Dec. 21 | 36 | 3 | 28 | .004 | .072 | * | .04 | 2.5 | 20 | 51 | 20 | 31 |

* None. † Trace.

ANALYSES OF NEWARK AQUEDUCT WATER.
Averages of Monthly Examinations.

| SOURCE OF SAMPLE | Temperature, Fah. | Turbidity | Color | Nitrogen as | | | | | Chlorine | Temporary Hardness (Alkalinity) | Total Solids | Loss on Ignition | Fixed Solids |
|---------------------------|-------------------|-----------|-------|--------------|--------------------|----------|----------|------|----------|------------------------------------|--------------|------------------|--------------|
| | | | | Free Ammonia | Albumenoid Ammonia | Nitrites | Nitrates | | | | | | |
| Oak Ridge Stream----- | 47.1 | 3.3 | 21.7 | .0140 | .0743 | trace | .067 | 2.5 | 25.8 | 55.7 | 22.1 | 34.6 | |
| Clinton Stream----- | 47.4 | 1.9 | 16.0 | .0051 | .0473 | " | .043 | 2.17 | 23.8 | 37.2 | 14.8 | 22.4 | |
| Kanouse Brook----- | 46.2 | 2.8 | 32.9 | .0069 | .0717 | " | .053 | 2.25 | 17.8 | 48.5 | 18.5 | 30.0 | |
| Echo Lake Stream----- | 45.6 | 1.7 | 30.3 | .0071 | .0877 | " | .070 | 2.50 | 19.3 | 51.1 | 20.1 | 31.0 | |
| Macopin Intake----- | 45.6 | 2.6 | 29.0 | .0100 | .0730 | " | .082 | 2.25 | 18.1 | 49.0 | 21.4 | 27.6 | |
| Cedar Grove Intake----- | 49.2 | 2.1 | 28.0 | .0886 | .0761 | " | .070 | 2.3 | 18.3 | 49.5 | 21.3 | 28.2 | |
| Cedar Grove Outlet----- | 51.1 | 1.8 | 22.7 | .0128 | .0690 | " | .058 | 2.25 | 18.9 | 48.4 | 19.4 | 28.0 | |
| Belleville Reservoir----- | 51.8 | 1.9 | 23.0 | .0100 | .0670 | " | .070 | 2.25 | 18.8 | 48.6 | 19.0 | 28.6 | |
| Laboratory faucet----- | 52.1 | 1.6 | 22.5 | .0090 | .0670 | " | .065 | 2.25 | 18.8 | 47.8 | 19.2 | 28.6 | |

The comparison table of total Solids in Grains per Gallon in the sample from the laboratory faucet is brought up to date and shows 3.37 and 2.78 Grains per Gallon, maximum and average, respectively, to be the highest we have yet recorded. It should be remembered, however, that these figures are unusually low as compared with most water supplies.

 TOTAL SOLIDS (Grains per U. S. Gallon).

| | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 |
|---------------|------|------|------|------|------|------|------|------|------|------|
| Maximum ----- | 2.06 | 3.00 | 2.92 | 2.92 | 2.92 | 2.92 | 3.24 | 3.09 | 2.92 | 3.37 |
| Minimum ----- | 1.96 | 1.93 | 1.98 | 1.69 | 2.04 | 1.60 | 2.44 | 2.35 | 2.22 | 2.23 |
| Average ----- | 2.53 | 2.68 | 2.45 | 2.32 | 2.52 | 2.33 | 2.71 | 2.60 | 2.66 | 2.78 |

The usual quota of miscellaneous samples were brought in for examination among which were the following:

Several samples of cream and a preparation used for thickening cream.

Two samples of cider tested for preservatives and one found to contain salicylic acid and the other benzoic acid.

Some pastry color found to be of coal-tar origin.

Two brands of unsweetened condensed milk were examined, and one found to be considerably above the quality stated on the label.

Eleven samples of well water were analyzed and some found badly contaminated.

Very respectfully,

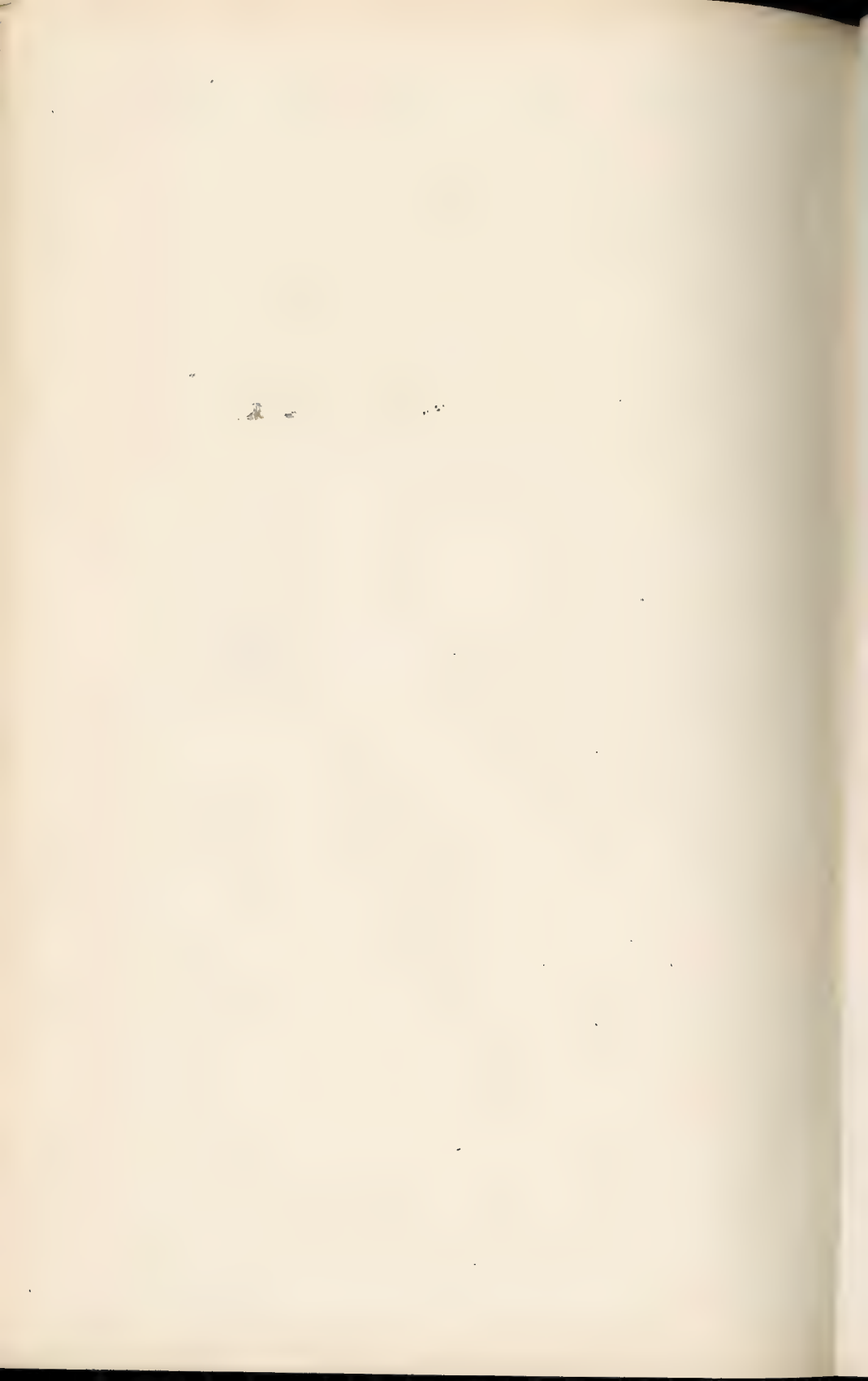
HERBERT B. BALDWIN,

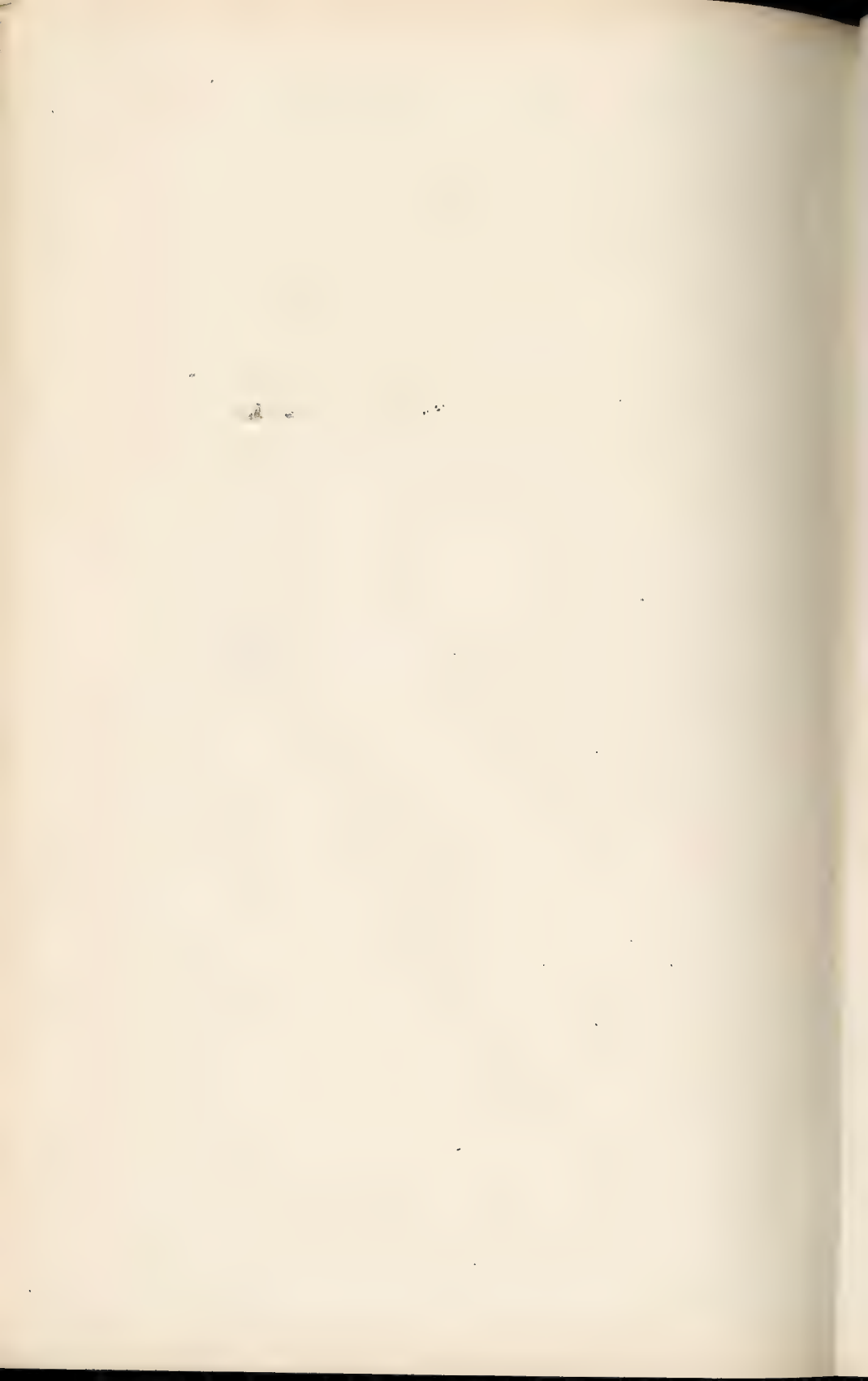
Chemist.

WELLS RECORDED.

| LOCATION OF WELLS | Sample No. | Kind and Depth | Purpose | Privy Vault and Cesspool within | | Result of Analysis |
|------------------------|---------------|-------------------|----------|------------------------------------|---------------|--------------------|
| | | | | 30 ft. | 50 ft. | |
| 44 Wilsey Street----- | 924 | Driven 30' | Domestic | 1 Privy vault | ----- | Very suspicious |
| 379 Chadwick Avenue-- | 925 | Open 20' | " | ----- | ----- | Badly contaminated |
| City Cemetery----- | 926 | Open 32' | " | ----- | 1 Privy vault | Contaminated |
| 31 Rowland Street---- | 927 | Cistern 10' | " | ----- | ----- | Very suspicious |
| 31 Rowland Street---- | 928 | Open 60' | " | ----- | ----- | Contaminated |
| 66 Madison Street----- | 929 | Pump 30' | " | ----- | ----- | Contaminated |

Newark Weather in the Year 1909





NEWARK WEATHER—1909

To D. D. Chandler, Health Officer:

DEAR SIR:—I herewith submit a record of the weather conditions of our City for the year 1909:

THE FACTS SHOWN IN DETAIL.

The laws that govern the distribution of the earth's atmosphere and control its phenomena necessarily produce different results on different parts of the earth's surface. The United States Weather Bureau has been making a thorough study of these conditions and frequently finds that unexpected variations from previously established principles occur. Most important studies of the higher realms of the atmosphere, through the aid of captive balloons and high flying kites, carrying either observers and self-recording meteorological instruments only, it is hoped will do away with the annoyance of nonfulfilled or wrong weather predictions and assure prompt and reliable prediction service to the public.

Every country of the world is appreciating the importance of the weather bureau service. Spain is co-operating with the International Aeronautical Commission, and the German Government in supporting the high level meteorological observatory at Teneriffe. Japan has established at Tokyo, a training school for meteorological observers, to secure uniformity as well as a high standard of work from the workers in the Weather Bureau.

LITTLE EXTREME WEATHER.

The tables and data given below show that during 1909 there was less severe heat, less severe cold, less snow and less rain than the average for a period of years; also less sunshine, as there were only sixty-one cloudless days in the whole year.

The bright moon shone out of a cloudless sky and lent its silvery light as a guiding lamp to the hesitating New Year, which was being borne in on a six-mile per hour cold, but gentle, southwest wind. January 1st was bright and sunshiny until about noon, when a heavy but short snow flurry whitened the air. Later the sun again appeared. The day was the second coldest of the winter thus far, and set the pace for a number of January cold days which were to follow. The first heavy snow storm of the winter fell on January 13th and 14th, when the gauges indicated a total fall of 3.25 inches. On January 16th a fall of 2.5 inches of snow covered the city, and another half-inch was added on the following day. More snow fell on January 29th and 30th, giving a depth of 3.75 inches. The total snow fall for the month was 10 inches.

February entered shivering on the roll of months, its first day having the record for a low minimum temperature of the year, 3 degrees above zero. The day also holds the palm as the coldest day of the winter, the average temperature being 12.5 degrees. Two days of skating on Branch Brook Lake, February 3rd and 4th, were all that could be credited to the sport on this lake for the entire winter. On February 10th, about 2.15 P. M., there came out of the sky a heavy storm, raging like a tornado with a velocity at times of sixty miles per hour and a width of about one mile. This wind and rain storm did considerable damage throughout its course.

Lincoln's birthday was cool and pleasant. The last of the ice disappeared from Branch Brook Lake on February 16th. Flocks of black birds flew about here, on February 19th. The spring buds began to swell because of the mild February weather. The snowdrops, narcissus, hyacinths and tulips began to peep out of the earth. The pussy willow, too, vied with all to push forth swelling buds. Washington's birthday was a mild, fine day. Only three-quarters of an inch of snow had fallen during February, and on the whole the month was extremely mild. An unusual number of rains or showers occurred during the month.

THE SPRING MONTHS.

March came in like a lamb, but about 10.30 P. M., March 3rd, lashed itself into a furious thirty-five-mile per hour gale and snow storm, which continued until about 1.50 P. M. on Inauguration Day, making the day particularly unpleasant and disagreeable. March, despite its many dark and gloomy days, retired like the traditional lamb, having had a thin, little snow blanket on the hills and in the City March 25th.

All Fools' Day was a warm, bright, cheery day. April 17th was a peculiar day in the matter of temperature. At 7 A. M. it was 54 degrees, and it gradually grew warmer and warmer until 3 P. M., when the thermometer registered 77 degrees. From 2.30 P. M. to 7.30 P. M. the southwest wind began to blow in fitful gusts, with a velocity varying from 8 to 60 miles per hour. About 7.30 P. M. the temperature began to drop and at 9 P. M. had fallen to 55 degrees. Good Friday, April 9th, was a cool and pleasant day. The first snow flurry of the spring occurred on April 10th. Easter Sunday was a glorious day. On April 19th there occurred the first thunder storm of the spring. Snow, hail, rain, thunder and lightning distinguished April 29th from the other days of the year. The month ended with a rainy day.

Showers introduced May, which possessed no remarkable meteorological characteristics. There were several days of May, on which the thermometer reached 85 degrees, but the month on the whole was normal in temperature. Decoration Day, May 31st, was clear and warm.

THE SUMMER ABNORMALLY COOL.

June had very few really clear days, its percentage of sunshine being but 71 per cent. On June 3rd occurred a beautiful eclipse of the moon, and on June 17th one of the sun. The period from June 19th to the end of the month was a memorable spell of warm weather, the temperature reaching 94 degrees on one of the days.

Although July began with several warm days, its ardor for high temperature cooled, and on the whole July, with its average temperature of 71.5 degrees, was an unusually cool month. Its rainfall was 1.57 inches, which was very small.

August, too, had a generally low average temperature. The highest temperature occurred on August 9th, when the 95 degree mark was reached. A record-breaking rainfall of 5.24 inches occurred during three days beginning on the evening of August 15th and continuing until the noon hour of August 17th. Beautiful lunar halos occurred on the nights of August 25th and 26th.

MID. WEATHER IN AUTUMN.

September was also pleasant and cool. The rainfall was meagre. Labor Day, September 6, and the Hudson and Fulton Saturday, September 25th, were fine, cool days. October was a cool and agreeable month and had only .55 inch of rain. The first frost of the fall occurred October 13th. Our City was darkened on October 21st by a peculiar, heavy haze, which hung over the City, although the sun

shone. A light snow flurry occurred on October 24th. November 1st was noted for the thick, dense fog which settled over the City about 7 P. M. On November 2, about 7.20 A. M., a beautiful rainbow was seen in the sky. A period of high barometric pressure beginning with November 6th and ending on November 11th, was notable for its coolness. On November 12th the thermometer reached 75 degrees, making a high temperature record for November 12th. A snowfall of .25 inch came as a forerunner of winter on November 19. In spite of this cool month roses were in bloom in several gardens in Forest Hill on November 23rd. On November 24th a snowfall of 2.75 inches occurred, and on the following day another half-inch of snow fell. Rain and sleet also accompanied the snow.

Thanksgiving was a miserably cold, trying, snowy and sleety day. On November 26th, there occurred an interesting total eclipse of the moon and a lunar halo.

FIRST MONTH OF WINTER.

December opened cold and crispy. The first ice of the season was seen in Branch Brook Lake on December 1st. The first December snow came in the night of December 12th, and continued until the next day, when an inch and one-half of snow had fallen. This was followed by rain and a heavy wind storm which did much damage. The devotees of skating have been able to enjoy the sport on the Meadows and small ponds about the City since December 17th. The first skating on Weequahic Lake was permitted on December 22nd. Christmas Day began with a bit of sunshine but about 9 A. M. it grew cloudy, and at 11.30 A. M. snow began to fall. This continued until 3 A. M. on the following day, when there had been a fall of seven and a half inches. The year closed with a spell of fine, cold weather.

EXCESSIVELY COLD OR HOT DAYS.

| Average number when temperature fell below freezing, 32 degrees Fahr. | | | Average number when temperature rose to 90 degrees or above. | | |
|---|---------|------|--|---------|------|
| MONTH | 1892-09 | 1909 | MONTH | 1892-09 | 1909 |
| January ----- | 26 | 21 | May ----- | 1 | 0 |
| February ----- | 23 | 18 | June ----- | 3 | 6 |
| March ----- | 16 | 13 | July ----- | 6 | 4 |
| April ----- | 3 | 1 | August ----- | 3 | 4 |
| October ----- | 1 | 1 | September ----- | 1 | 0 |
| November ----- | 9 | 4 | October ----- | 1 | 1 |
| December ----- | 20 | 23 | | | |
| Totals ----- | 98 | 71 | Totals ----- | 15 | 14 |

PRECIPITATION (IN INCHES).

| MONTH | Rain and Melted Snow | | | Total Snow Unmelted | |
|-----------------|----------------------|----------------|-----------|---------------------|-----------|
| | Period 1843-91 | Period 1892-09 | Year 1909 | Period 1892-08 | Year 1909 |
| January ----- | 3.65 | 3.39 | 1.70 | 9.73 | 10.00 |
| February ----- | 3.60 | 3.71 | 6.29 | 3.40 | .75 |
| March ----- | 3.81 | 3.82 | 2.90 | 5.91 | 3.10 |
| April ----- | 3.53 | 3.52 | 6.68 | 6.17 | 1.00 |
| May ----- | 3.97 | 4.18 | 1.05 | ---- | ---- |
| June ----- | 3.57 | 3.62 | 3.92 | ---- | ---- |
| July ----- | 4.28 | 4.33 | 1.57 | ---- | ---- |
| August ----- | 5.07 | 5.17 | 6.57 | ---- | ---- |
| September ----- | 3.75 | 3.65 | 2.16 | ---- | ---- |
| October ----- | 3.58 | 3.38 | .55 | ---- | ---- |
| November ----- | 3.63 | 3.40 | 1.47 | 2.27 | 3.50 |
| December ----- | 3.63 | 3.69 | 3.04 | 5.63 | 3.71 |
| Totals ----- | 46.07 | 45.86 | 37.90 | 33.11 | 22.04 |

NOTE—One inch of melted snow averages one-tenth inch of rain.

CHARACTER OF THE DAYS IN 1909.

| MONTH | Clear (Cloudless). | Partly Cloudy (Fair). | Cloudy (Sunless). | Days in Which Precipitation occurred. | Average No. Days Precipitation occurred 1892-1909. |
|-----------------|--------------------|-----------------------|-------------------|---------------------------------------|--|
| January ----- | 0 | 15 | 16 | 11 | 11 |
| February ----- | 1 | 13 | 14 | 13 | 9 |
| March ----- | 5 | 14 | 12 | 14 | 13 |
| April ----- | 4 | 14 | 12 | 13 | 14 |
| May ----- | 2 | 19 | 10 | 9 | 12 |
| June ----- | 3 | 18 | 9 | 10 | 11 |
| July ----- | 3 | 23 | 5 | 5 | 13 |
| August ----- | 3 | 19 | 9 | 9 | 11 |
| September ----- | 5 | 14 | 11 | 7 | 8 |
| October ----- | 12 | 9 | 10 | 9 | 8 |
| November ----- | 6 | 12 | 12 | 10 | 11 |
| December ----- | 7 | 13 | 11 | 8 | 10 |
| Totals ----- | 61 | 179 | 131 | 118 | 131 |

TEMPERATURE CHART IN FAHRENHEIT DEGREES.

| MONTH | Monthly Mean Temperature | | | Maximum Recorded | | Minimum Recorded | |
|-----------------|--------------------------|--------------------|------|--------------------|------|--------------------|------|
| | 1843 to 1891 | 1892 to 1909 | 1909 | 1892 to 1909 | 1909 | 1892 to 1909 | 1909 |
| January ----- | 29 | 29 | 32.7 | 66 | 58 | 10 | 1 |
| February ----- | 31 | 27 | 37.2 | 67 | 59 | 9 | *3, |
| March ----- | 38 | 39 | 38.4 | 78 | 70 | 5 | 20 |
| April ----- | 49 | 53 | 51.0 | 93 | 85 | 24 | 25 |
| May ----- | 59 | 61 | 61.9 | 96.4 | 85 | 34 | 40 |
| June ----- | 69 | 69 | 71.2 | 99 | 94 | 45 | 51 |
| July ----- | 74 | 74 | 73.4 | 103 | 94 | 49 | 53 |
| August ----- | 72 | 73 | 70.9 | 97 | †95 | 50 | 50 |
| September ----- | 65 | 66 | 65.3 | 97.3 | 84 | 34 | 46 |
| October ----- | 53 | 54 | 55.4 | 89 | 80 | 27 | 30 |
| November ----- | 43 | 43 | 46.5 | 74 | 75 | 15 | 27 |
| December ----- | 33 | 32 | 31.7 | 62 | 54 | 2 | 4 |

*Lowest temperature of the year, February 1.

†Highest temperature of the year, August 8.

Annual mean 1843-1891, 53 degrees.

Annual mean 1891-1909, 51 degrees.

Annual mean 1909, 53.2 degrees.

MISCELLANEOUS INCIDENTS OF THE YEAR 1909.

| MONTH | Barometer | | | Wind | | Hu- mid- ity | Sun- shine |
|-----------------|-----------|--------|---------|----------------------|----------|--------------------|------------------------|
| | Highest | Lowest | Average | Average Direction | Velocity | Average | Per Cent. Sunshine* |
| January ----- | 30.52 | 29.24 | 30.08 | N W | 42 | 81.3 | 45 |
| February ----- | 30.27 | 29.30 | 29.91 | S W | 43 | 83.2 | 60 |
| March ----- | 30.56 | †28.95 | 29.81 | N W | 40 | 85.0 | 60 |
| April ----- | 30.50 | 29.62 | 30.00 | S E | 60 | 80.2 | 63 |
| May ----- | 30.20 | 29.61 | 29.94 | N W | 35 | 85.8 | 64 |
| June ----- | 30.17 | 29.70 | 29.93 | W | 25 | 84.7 | 71 |
| July ----- | 30.11 | 29.50 | 29.86 | S W | 40 | 68.7 | 78 |
| August ----- | 30.20 | 29.13 | 29.94 | S | 20 | 73.0 | 75 |
| September ----- | 30.25 | 29.75 | 30.03 | W | 30 | 73.2 | 65 |
| October ----- | 30.25 | 29.60 | 29.98 | N W | 30 | 71.6 | 70 |
| November ----- | †30.67 | 29.60 | 30.17 | N W | 30 | 78.2 | 65 |
| December ----- | 30.40 | 29.65 | 30.00 | N W | 30 | 75.7 | 75 |

Annual average for the barometer, 29.94.

Prevailing direction of the wind, west.

*Percentage of sunshine, based upon estimates obtained from three observations daily. The figures state percentage of time the sun actually shone, compared with time it was scheduled to shine. The bureau has no sunshine recorder.

†Highest barometer recorded for 1909.

‡Lowest barometer recorded for 1909.

HOLIDAYS IN 1909.

January 1, New Year's Day—Partly cloudy, cold; no snow on ground, only a little snow flurry.

February 12, Lincoln's Birthday—Pleasant, cool day.

February 22, Washington's Birthday—Mild, fine day.

March 4, Inauguration Day—Cold, disagreeable; snow, sleet, rain, hail and high winds.

April 9, Good Friday—Mild, pleasant day.

April 11, Easter Monday—An extremely clear, fine day.

May 31, Memorial Day—Clear, warm day.

July 4, Independence Day—Splendid, cool day.

September 6, Labor Day—Clear, mild day.

November 2, Election Day—Cloudy, with rain at night.

November 25, Thanksgiving Day—Cold and disagreeable.

December 25, Christmas Day—Mild, cloudy, snowy day.

Respectfully submitted,

WILLIAM WIENER, *Meteorologist,*
U. S. Weather Bureau.

BOARD OF HEALTH.

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| | |
|---|------------------|
| U. S. Census Population, 1900..... | 246,070 |
| Estimated Population, 1909..... | 311,000 |
| Total area of the City's square miles..... | 23.40 |
| Built up square miles..... | 16 $\frac{1}{2}$ |
| Meadow land, square miles..... | 8 |
| Length of River and Bay Front, miles..... | 10 $\frac{1}{2}$ |
| Number of miles of granite block..... | 57.47 |
| " " " " trap block..... | 11.539 |
| " " " " telford pavement..... | 32.394 |
| " " " " cobble stone pavement..... | .471 |
| " " " " asphalt pavement..... | 51.373 |
| " " " " brick pavement..... | 33.890 |
| " " " " bitulithic pavement..... | 8.218 |
| " " " " wood block pavement..... | 0.475 |
| " " " " bitulithic macadamized pavement... | .101 |
| Total length of paved streets, miles..... | 201.079 |
| Number of miles of unpaved streets..... | 85.24 |
| Length of Electric Railways, miles..... | 156 |
| Length of Steam Railways, miles..... | 25 $\frac{1}{2}$ |
| Length of brick sewers, miles..... | 77.54 |
| Length of pipe sewers, miles..... | 157.90 |
| Length of private sewers, miles..... | 33.81 |
| Total length of sewers, miles..... | 269.25 |
| Total number of sewer basins..... | 3,445 |
| Length of water mains, miles..... | 371 |
| Average daily consumption of water, gallons..... | 36,000,000 |
| Capacity of water supplied per day, gallons..... | 50,000,000 |
| Number of buildings..... | 52,224 |
| Shade trees planted..... | 3,765 |

PUBLIC PARKS.

| | |
|------------------------|------|
| Military, acres..... | 6.45 |
| Washington, acres..... | 3.40 |
| Lincoln, acres..... | 4.37 |

NEW PARKS.

| | |
|--------------------------|--------|
| Branch Brook, acres..... | 277.50 |
| Eastside, acres..... | 12.50 |
| Westside, acres..... | 23 |
| Weequahic, acres..... | 323 |
| Riverbank | 5.75 |

In concluding my report I wish to express my sincere thanks to the members and employees for their active co-operation and assistance in carrying on the work for the year.

DAVID D. CHANDLER,
Health Officer.

